

E-001/GR-91-605 ORDER

FINDINGS OF FACT, CONCLUSIONS
OF LAW, AND ORDER

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Don Storm
Tom Burton
Cynthia A. Kitlinski
Dee Knaak
Norma McKanna

Chair
Commissioner
Commissioner
Commissioner
Commissioner

In the Matter of the Application
of Interstate Power Company for
Authority to Increase Its Rates
for Electric Service in the
State of Minnesota

ISSUE DATE: June 12, 1992

DOCKET NO. E-001/GR-91-605

FINDINGS OF FACT, CONCLUSIONS OF
LAW, AND ORDER

PROCEDURAL HISTORY

I. INITIAL PROCEEDINGS

On August 15, 1991, Interstate Power Company (Interstate or the Company) filed a petition under Minn. Stat. § 216B.16 (1990) for an increase in Minnesota jurisdictional electric rates of \$7,979,327, a 21.3 percent increase over current rates. The Company also filed a petition for interim rates to become effective in two steps: \$3,716,195, or 9.9 percent on October 14, 1991, and \$7,459,053, or 19.9 percent on May 1, 1992.

On September 25, 1991, the Commission accepted the Company's filings, suspended the proposed rates, and ordered contested case proceedings under Minn. Stat. § 216B.16, subd. 1 (1990).¹ The Office of Administrative Hearings assigned Administrative Law Judge (ALJ) Allen E. Giles to the case.

On October 11, 1991, the Commission authorized collection of an additional \$4,234,000 in additional annual revenues as interim rates for service to be rendered on and after October 14, 1991.²

On October 25, 1991, the ALJ held a prehearing telephone conference.

On November 19, 1991, the ALJ issued a Prehearing Order establishing the hearing schedule and procedural guidelines governing the conduct of the case.

¹ ORDER ACCEPTING FILING AND SUSPENDING RATES; NOTICE AND ORDER FOR HEARING.

² ORDER SETTING INTERIM RATES.

II. PARTIES AND REPRESENTATIVES

A. Intervenors

The ALJ granted petitions to intervene submitted by the following parties:

Minnesota Department of Public Service (the Department), represented by Scott Wilensky and Susan Dreschel, Special Assistant Attorneys General, 1100 Bremer Tower, Seventh Place and Minnesota Street, St. Paul, Minnesota 55101.

Residential Utilities Division of the Office of the Attorney General (RUD-OAG), represented by Gary R. Cunningham, Special Assistant Attorney General, 340 Bremer Tower, Seventh Place and Minnesota Street, St. Paul, Minnesota 55101.

B. The Company

Interstate was represented by Clement F. Springer, Jr., Defrees and Fiske, 200 South Michigan Avenue, Suite 1100, Chicago, Illinois 60604, and Kent M. Ragsdale, Interstate Power Company, 1000 Main Street, P.O. Box 769, Dubuque, Iowa 52004-0769.

III. PUBLIC HEARINGS AND PUBLIC TESTIMONY

The ALJ held public hearings to receive comments and questions from non-intervening ratepayers. The dates and locations of these hearings are listed below, followed by the number of persons who attended/spoke at each hearing.

January 13, 1992	1:30 p.m. Stewartville	(3/3)
January 13, 1992	7:00 p.m. Albert Lea	(3/1)
January 14, 1992	1:30 p.m. Fulda	(2/1)
January 14, 1992	7:00 p.m. LeCenter	(0/0)

During the course of these four hearings, a total of eight members of the public attended and five gave oral comments. Interstate and the Department made presentations at each hearing. Interstate customers who participated in the public hearings stated essentially the following regarding the proposed rate increase:

Interstate serves a predominantly agricultural area in Minnesota and should not be allowed such a large increase in its rates to its customers, many of whom are suffering from the nation-wide recession. Annual increases would be preferable.

Many of Interstate's Minnesota customers are elderly and receive fixed income and claim economic hardship and difficulty in paying or inability to pay large

increases in rates.

Twenty-eight members of the public contacted the Commission by telephone or letter to comment on the proposed rate increase. Though not all commentators opposed the rate increase, the vast majority of the letters expressed concerns substantially similar to the comments made at public hearings, particularly that the amount of the requested 21.3% increase was far above inflation and, for that reason, excessive.

IV. EVIDENTIARY HEARINGS

The ALJ held evidentiary hearings on January 22-24 and 29, 1992.

V. PROCEEDINGS BEFORE THE COMMISSION

The ALJ filed his report on April 20, 1992. On May 6, 1992, the Commission heard oral argument. On May 11, 1992, the Commission met to deliberate this matter. Upon review of the entire record of this proceeding, the Commission makes the following Findings, Conclusions and Order.

FINDINGS AND CONCLUSIONS

VI. JURISDICTION

The Commission has general jurisdiction over the Company under Minn. Stat. §§ 216B.01 and .02 (1990). The Commission has specific jurisdiction over rate changes under Minn. Stat. § 216B.16 (1990).

The case was properly referred to the Office of Administrative Hearings under Minn. Stat. §§ 14.48-14.62 (1990) and Minn. Rules, Part 1400.0200 et seq.

VII. FURTHER ADMINISTRATIVE REVIEW

Under Minn. Rules, Part 7830.4100, any petition for rehearing, reconsideration, or other post-decision relief must be filed within 20 days of the date of this Order. Such petitions must be filed with the Executive Secretary of the Commission, must specifically set forth the grounds relied upon and errors claimed, and must be served on all parties. The filing should include an original, 13 copies, and proof of service on all parties.

Adverse parties have ten days from the date of service of the petition to file answers. Answers must be filed with the Executive Secretary of the Commission and must include an

original, 13 copies, and proof of service on all parties. Replies are not permitted.

The Commission, in its discretion, may grant oral argument on the petition or decide the petition without oral argument.

Under Minn. Stat. § 216B.27, subd. 3 (1990), no Order of the Commission shall become effective while a petition for rehearing is pending or until either of the following: ten days after the petition for rehearing is denied or ten days after the Commission has announced its final determination on rehearing, unless the Commission otherwise orders.

Any petition for rehearing not granted within 20 days of filing is deemed denied. Minn. Stat. § 216B.27, subd. 4 (1990).

VIII. INTERSTATE POWER COMPANY

Interstate is an investor-owned combination electric and gas utility engaged in the generation, transmission and distribution of electric energy in a 10,000 square mile service area in northeast and north central Iowa, southern Minnesota, and northwestern Illinois. In these locations, the Company serves over 234 communities and 155,000 retail electric customers.

In its Minnesota service area, Interstate provides electric service to 38,000 customers. The largest community served in Minnesota is Albert Lea, with a population of 19,000. For the year ending December 31, 1990, Interstate derived approximately 16 percent of its total revenue from electric sales to Minnesota customers.

IX. BURDEN OF PROOF

Minn. Stat. § 216B.16, subd. 4 (1990) states: "The burden of proof to show that the rate change is just and reasonable shall be upon the public utility seeking the change."

The Minnesota Supreme Court has articulated standards for the burden of proof in rate cases. In the Matter of the Petition of Northern States Power Company for Authority to Change its Schedule of Rates for Electric Service in Minnesota, 416 N.W.2d 719 (Minn. 1987). In the Northern States Power case the Court divided the ratemaking function of the Commission into quasi-judicial and legislative aspects. The Commission acts in a quasi-judicial mode when it determines the validity of facts presented. Just as in a civil case, the burden of proof is on the utility to prove the facts by a fair preponderance of the evidence. Such items as claimed costs or other financial data are facts which the utility must prove by a fair preponderance of the evidence.

The Commission acts in a legislative mode when it weighs the facts presented and determines if proposed rates are just and reasonable. Acting legislatively, the Commission draws inferences and conclusions from proven facts to determine if the conclusion sought by the utility is justified. The Commission weighs the facts in light of its statutory responsibility to enforce the state's public policy that retail consumers of utility services shall be furnished such services at reasonable rates. In its legislative capacity, the Commission forms determinations such as the usefulness of a claimed item, the prudence of company decisions, and the overall reasonableness of proposed rates.

The utility, therefore, faces a two part burden of proof in a rate case. When presenting its case in the rate change proceeding, the utility has the burden to prove its facts by a fair preponderance of the evidence. The utility also has the burden to prove, by means of a process in which the Commission uses its judgment to draw inferences and conclusions from proven facts, that the proposed rates are just and reasonable.

X. TEST YEAR

Interstate proposed a twelve month historical test year ending December 31, 1990 that has been adjusted for known and measurable changes. Interstate has also made financial adjustments to comply with various Commission policy statements. No party opposed Interstate's selection of a test year. The ALJ found the Company's proposed test year to be reasonable. The Commission will accept Interstate's proposed 1990 test year period.

XI. CONSERVATION

A. Conservation Expenses

Interstate's test year expenses included \$6,306 for CIP expenses. The Department concluded that this amount was inadequate, given the Company's 1991 approved CIP budget of \$159,316. Because the Commissioner of the Department of Public Service's (the Commissioner's) decision on Interstate's 1992 CIP (Docket E-001/CIP-91-535) was due to be issued before the conclusion of this case, the Department recommended that the amount of test year CIP expenditures included in final rates be based on the 1992 CIP budget, as approved by the Commissioner. The Company agreed with the Department's proposal.

On March 9, 1992, the Commissioner issued her decision establishing Interstate's 1992 CIP budget at \$430,179. The Commission finds that this is the appropriate amount to be included in the test year for current CIP expenses.

B. Conservation Cost Recovery

The Commission finds that it is appropriate to recover the entire amount of approved CIP expenditures for 1992 (\$430,179) in the Conservation Cost Recovery Charge (CCRC). The use of the most recent budget in calculating the CCRC will result in more timely recovery of conservation costs for Interstate and a lesser burden on the ratepayers when the CIP Tracker Account is trued up in future rate proceedings.

On January 15, 1991, the Commission approved Interstate's CIP tracker mechanism as modified by the Department. (Docket No. E-001/M-90-658). The Company is required to use actual sales to calculate its monthly recovery of CIP costs. Most utilities with CIP trackers currently use a CCRC to track recovery of CIP costs. The CCRC is calculated by dividing approved test year CIP expenses by test year kilowatt hour (kWh) sales. The Commission finds that the appropriate CCRC for Interstate is equal to \$430,179 divided by 609,031,094 kWh, or \$0.00071 per kWh.

Before this rate case, Interstate has not had CIP costs built into rates and has not booked any revenues to the CIP tracker account. The Commission finds that the Company should begin applying the CCRC revenues to the tracker account as of November 1, 1991.

C. CIP Tracker Balance

Interstate did not seek recovery of past CIP expenditures in its direct case. Through information requests, the Department determined that Interstate had booked \$67,733 in CIP expenditures to the tracker account. These expenditures included the costs incurred by the Company from January, 1990 to October, 1991.

The Department recommended that Interstate be allowed to recover all costs booked to the tracker after the tracker was established in January, 1991. The expenditures incurred by the Company between January and October, 1991 equaled \$66,712, including \$1,602 in carrying charges. Interstate and the ALJ agreed with the Department's recommendation.

The Commission finds that Interstate should recover the \$66,712 in expenses which were booked to the tracker after the tracker was established. Allowance of these amounts is consistent with Minn. Stat. § 216B.241 (1990) and Minn. Stat. § 216B.16, subd. 6b (1990), which states as follows:

All investments and expenses of a public utility ... incurred in connection with energy conservation improvements shall be recognized and included by the commission in the determination of just and reasonable rates as if the investments and expenses were directly made or incurred by the utility in furnishing utility service.

Recovery of the tracker balance is also consistent with Minn. Stat. § 216B.03 (1990), which requires the Commission to set rates to encourage conservation.

How the Company should recover the CIP tracker balance is a more difficult question. The Commission has traditionally allowed utilities to recover the CIP tracker balance through a reduction in the interim rate refund at the conclusion of a rate case. In this case, however, there will be no refund because the Commission will set a final revenue requirement which is higher than the interim revenue requirement.

The Company proposed to leave the \$66,712 in the CIP tracker and add \$22,237 to test year conservation expenses to collect this amount over three years. If the Commission did not leave the balance in the tracker, the Company argued that the first year average unamortized balance should be placed in rate base, giving the Company the full time value of its money.

The Department opposed the Company's proposal to leave the balance in the tracker account. The Department argued that the Commission traditionally zeroes the tracker in a rate case, and that it would be inappropriate to mix approved and unapproved conservation expenditures in the tracker.

The Department recommended that Interstate be allowed to recover the tracker balance over a three-year period, with no rate base treatment of the unamortized amount. Because it is not known precisely when the Company will file its next rate case, the Department argued that its proposal appropriately balances the possibility of over- or undercollection of past CIP expenditures.

The ALJ found that it would not be appropriate to include the unamortized balance of the CIP tracker account in rate base. He reasoned that funds in the tracker account have already accumulated a return. He also determined that a three-year amortization with no rate base treatment of the unamortized balance would provide a reasonable estimate of cost recovery based on the probability of a rate case being filed in the future.

The Commission finds that a five year amortization period is more appropriate than a three year period in this case. The Company has historically filed rate cases every five years, and the Commission has seen no reason to believe that this trend will not continue into the future. Furthermore, in the event the Company does file a rate case earlier than five years from now, it may address the recovery of unamortized amounts in that case.

The Commission agrees with the Department that the CIP tracker should be zeroed at the time of the rate case. The intent of the tracker is not to simply accumulate funds, but to allow exact

recovery of expenditures. A zero balance provides parties with the appropriate level to review for purposes of determining prudence of expenditures. The Commission finds that the CIP tracker account should be zeroed as of October 31, 1991.

The Commission also finds that it is appropriate to place one-half of the average first year's unamortized balance of past conservation expenditures in rate base. The Commission supports the idea of rate base treatment of these expenses. CIP tracker accounts have been designed to achieve dollar-for-dollar recovery of conservation expenses, including the costs of carrying expenses in the tracker before recovery of those expenses. It is not reasonable to deny the utility the time value of its money for conservation expenses simply because there is no interim rate refund in this case.

The Commission disagrees with the ALJ that the carrying charges already collected on these funds is sufficient. While the carrying charges which have been booked to the tracker account compensate the Company for carrying this money in the past (from January to November, 1991), it does not recognize the Company's need to be compensated for carrying unamortized balances as this money is recovered through rates. The Commission also finds that the Department's concerns regarding potential overrecovery of these expenses in rates is mitigated by the Commission's determination that a five-year amortization period is more appropriate than a three year period.

The Commission will modify the rate base treatment of these expenses proposed by the Company, however, in order to recover past conservation expenses as accurately as possible. Because the unamortized balance of past conservation expenses will decline over the five year period, using one-half of the average first year's unamortized balance will ensure that, on average, the Company will collect only those carrying charges to which it is entitled. To achieve this result, the Company's test year expenses will be increased by \$30,021.

D. Adequacy of Conservation Filing

Minn. Stat. § 216B.16, subd. 1 (1990) requires utilities filing for a general rate increase to include an energy conservation plan pursuant to Minn. Stat. § 216B.241 (1990). Interstate submitted its plan with its general rate filing on August 15, 1991.

Department witness Dr. McGuire testified that while Interstate's plan minimally meets the requirements of the statute, it should be improved by incorporating the concept of the "conservation continuum," i.e. the range of conservation options from audits to more sophisticated projects with potential for greater energy savings such as direct retrofits, rebate programs and direct assistance for new construction, in its statement of long-term

goals. The Department recommended that the Commission require Interstate to supplement its plan with the desired discussion within 90 days.

The Commission believes that the appropriate focus of the rate case conservation plan is on long-term conservation goals. Interstate's short-term plans and programs are currently reviewed by the Department in the Conservation Improvement Program (CIP) process. The Commission finds that Interstate's long-term conservation goals should be more clearly defined as suggested by the Department. Therefore, the Commission will order Interstate to resubmit its conservation plan within 90 days, including a discussion of the "conservation continuum" in its discussion of goals and objectives.

E. Demand-Side Management (DSM) Financial Incentives

On February 28, 1991, the Commission issued its ORDER REQUIRING ELECTRIC UTILITIES TO FILE FINANCIAL INCENTIVE PROPOSALS IN 1991, In the Matter of a Summary Investigation into Financial Incentives for Encouraging Demand-Side Resource Options for Minnesota Electric Utilities and Bidding Systems, Docket E-999/CI-88-212. In accordance with the Commission's Order, Interstate filed a proposal for a DSM financial incentive in its direct case.

For its DSM financial incentive, Interstate proposed that it receive monthly recovery of its lost margins due to conservation through an automatic adjustment clause. The Company further proposed that the Commission allow it to recover the difference between its full rate and interruptible rate between rate cases.

The Department argued that Interstate's proposal to recover 100 percent of lost margins due to conservation failed to link Interstate's incentive with its performance in meeting conservation goals. In light of that, the Department stated that Interstate's proposed incentive was too generous. The Department recommended that Interstate's proposal be modified to vary its lost margin recovery according to the Company's performance in meeting its conservation savings goals. Under the Department's proposal, Interstate would receive 50 percent of its lost margins if it achieved less than 75 percent of projected savings, 75 percent of lost margins if it achieved between 75 and 100 percent of projected savings, and 100 percent of lost margins if it achieved greater than or equal to 100 percent of projected savings.

The Department also recommended that the Commission require Interstate to file a plan for estimating actual energy savings for its direct-impact programs, and that the Company be required to file a calculation of its lost revenues annually on March 1.

Although the Department supports the concept of financial incentives, it opposed Interstate's proposal to recover its lost margins through an automatic adjustment clause. Department witness McGuire noted that this would involve either a separate conservation adjustment on bills, or a combination of the conservation adjustment with the Fuel Clause Adjustment. The Department argued that automatic adjustment for conservation expenditures was contrary to law as well as good public policy.

The Department also argued that Interstate should not be permitted to recover the difference between the standard rate and the interruptible rate. The Department stated that the lost margins the company experiences in operating the interruptible program are offset by the benefits received in system planning and reduced demand. The Department argued that the Company does not need an additional incentive to operate this program.

The Commission finds that the Department's modifications to Interstate's proposal result in a well-reasoned and balanced financial incentive proposal for Interstate. Because Interstate is relatively new to the CIP process, the Department's proposal to limit recovery of lost margins based on the Company's performance in CIP appropriately limits the risk to the ratepayers. The Commission will adopt the Department's proposal.

The Commission also finds that at this time, it is appropriate for the Company to book its financial incentive to the CIP tracker account for recovery in the next rate proceeding. This method of recovery is consistent with the treatment of other utilities' financial incentive mechanisms. The Commission agrees with the Department that conservation expenditures should be included in base rates, and not separated as a line item on a customer's bill.

The Commission will require the Company to file a plan for estimating actual energy savings of direct-impact programs as a compliance filing in this case. Also, Interstate will be required to file a calculation of lost revenues for a given year by March 1 of the succeeding year, beginning with March 1994.

XII. RATE BASE

In its initial filing, Interstate proposed a Minnesota jurisdictional rate base of \$79,199,016. Interstate reduced this amount to \$79,132,618 in its reply brief. The Commission will use the reply brief amount as a starting point in its determination of rate base in this proceeding. Individual rate base items will be discussed below.

A. Rate Case Expenses

Interstate originally proposed that rate base include \$443,296 for unamortized rate case expense and operating income include \$177,319 for amortization of rate case expense. These amounts were based on a projected total cost of \$531,958 to be amortized over three years. The Company calculated its estimated rate case expenses by taking expenses from its last rate case in 1986 and increasing those costs for inflation. Rate case costs from 1986 also included costs of appealing the Commission's 1986 rate case decision.

Interstate revised its original amount to exclude \$107,389 that represents the cost of appealing the Commission's decision in the 1986 rate case. The resulting, revised amounts are \$353,805 and \$141,523 for rate base and amortization expense respectively.

The Company proposed that the unamortized rate case expenses be included in rate base to recognize the time value of money. The Company argued that rate case costs that have not been amortized should not work to the detriment of the Company by being excluded from rate base. The Company also argued that rate case expenses are a normal cost of supplying electric service and ratepayers should pay the full cost associated with the benefits of regulation. By not including unamortized rate case expenses in rate base, ratepayers will not be paying the full cost of benefits they receive and the Company will be prevented from earning its required return.

The Department agreed with the Company that the costs of its appeal of the rate case decision should be excluded from rate case expenses and that the balance of its rate case expenses should be amortized over three years. The Department disagreed with the Company that the unamortized balance of rate case expenses should be included as a rate base item.

The Department argued that both shareholders and ratepayers benefit from the rate case process and therefore should share the burden of the cost of a rate case. Shareholders benefit because a rate increase usually translates into higher earnings. Therefore, an equitable balance is achieved by allowing the Company to recover the amortization expense but disallowing the unamortized balance in rate base.

The ALJ agreed with the Department and recommended excluding the portion of rate case expenses that represented the costs of appeal. The ALJ also agreed with the Department that rate case expenses should be amortized over a three year period and that the unamortized rate case expenses should be excluded from rate base.

Appeal Costs

The Commission accepts the exclusion of \$107,389 of rate case expenses. All parties including the Company agreed that this amount should be excluded from the cost of service. The excluded amount of \$107,389 amortized over three years reduced annual operating expenses by \$35,796.

Amortization Period

As to the amortization period, the Commission finds that a five year period is more appropriate. There have been five year intervals between Interstate's last two rate cases and there is nothing in the record to indicate that the Company will file its next rate case any sooner. If a three year amortization period were adopted and the historical pattern is maintained, the Company would over-collect for this item.

Rate Base and Operating Income Treatment

The Company, the Department, and the ALJ agree that an amortization of the Company's rate case expenses should be included in test year operating expenses. Regarding the unamortized balance of rate case expenses, the Company proposed rate base treatment of that amount and the Department and the ALJ opposed that proposal.

In approaching this issue, the Commission recognizes that until the Company fully recovers its rate case expenses, it experiences a cost of "carrying" the unamortized balance.³ At the same time, the Commission finds that shareholders as well as ratepayers benefit from the rate case process and, therefore, the costs incurred by the Company in the course of that process should be shared between ratepayers and shareholders.

Accordingly, the Commission will reject the Company's proposal. The Company's test year proposal does not reflect the benefit derived by shareholders from those expenses and its rate base proposal would result in over recovery of its carrying costs after the first year. Likewise, the Commission will reject the Department and the ALJ's recommendation to place an annual amortized amount of the rate case expenses in the test year expenses and to exclude the unamortized rate case expenses from the rate base. This treatment would allow the Company to recover all its rate case expenses from the ratepayers over the amortization period but would deny it recovery of its carrying costs.

³ The Commission bases this conclusion on the view that the Company does not fully recover in one year the amount it expends on rate case expenses and, therefore, is entitled to receive its authorized return on the balance.

Since both groups benefit significantly from rate case expenditures and the carrying costs associated with those expenditures, the Commission seeks a method of sharing those costs so that shareholders and the ratepayers share the burden of these costs more equitably. Towards this end, the Commission will expense the Company's rate case expenditures and allow rate base treatment as follows:⁴

The Commission will allow one-half of the Company's rate case expenditures. The allowed expenditures will be amortized over a five year period. The annual amortization amount will be included as a test year expense.⁵ The amount allowed as an expense (50%) will be paid by the ratepayer and the amount disallowed (50%) will be borne, in effect, by the shareholders. Also, the Commission will include in the rate base one-half of the first year average unamortized balance of the rate case expenses allocated to the ratepayers, thereby allowing the Company to earn the approved rate of return on that amount.⁶

The Commission recognizes that the unamortized balance will decline each year, as the Company recovers the annual \$42,457 amortization amount. Consequently, allowing the Company to earn a rate of return on one-half of first year's average unamortized balance every year until the next rate case means that it will "under-recover" its carrying costs in early years and "over-recover" its carrying costs in later years. Over the projected five year period, however, these allowed earnings will average

⁴ To achieve more equitable sharing of these costs between ratepayers and shareholders, the Commission here alters the approach taken in recent rate cases. In those cases, the Commission allowed the Company to recover all its rate case expenses from ratepayers, either by deducting that amount from a refund or by placing an annual amortized amount of those expenses in the test year. Regarding the carrying costs incurred by the Company, the Commission has often denied recovery of that cost entirely by excluding any unamortized balance from rate base.

⁵ One-half of the Company's \$424,569 rate case expenses is \$212,284. That amount (\$212,284) amortized over a five year period is \$42,457. The annual amortization expense for rate case costs that will be included in the test year, therefore, is \$42,457.

⁶ The rate case expenses allowed, i.e. allocated to the ratepayer, is \$212,284. The "first year average unamortized balance of the allowed expenditures," therefore, is \$212,284 minus the average amount amortized during the first year that the rates adopted in this Order are in effect. The average amount amortized during the first year is \$21,228. The average unamortized balance of the allowed expenditures for the first year, then, is \$191,056 and one-half of that figure is \$95,528.

out and the Company will recover the appropriate amount, i.e. 50% of the carrying cost associated with its rate case expenses. The other half of those costs, of course, will be appropriately borne by the shareholders.

To summarize regarding rate base and expense treatment, then, the Commission will (1) allow \$42,457, i.e. one-fifth of the Company's allowed rate case expenses amortized over a five year period, to be recovered as a test year expense and (2) place \$95,528, i.e. one-half of the first year average unamortized balance in the rate base.

Rate Case Report

The Commission is concerned about the estimation of rate case expenses. Because Interstate has estimated rate case costs based on its prior rate case, the Commission will require Interstate to report its actual expenses after the case has been completed. In its report of rate case expenses, Interstate will show a breakdown of the expenses such as attorney's fees, regulatory expense, expert witness costs and other.

B. Rate Base Treatment of CIP Costs

For reasons discussed previously in the **CONSERVATION** section of this Order at pages 6 to 8, a portion of CIP costs have been included in the rate base.

C. Rate Base Summary

Based on the above findings, the Commission concludes that the appropriate rate base for the test year is \$78,908,305 as shown below:

Utility Plant in Service	\$137,635,981
Accumulated Depreciation and Amortization	(54,435,044)

Net Utility Plant in Service	83,200,937
Retirement Work in Progress	49,418
Acquisition Adjustment (Net)	377,008
Accumulated Deferred Income Taxes	(7,161,321)
Rate Case Expenses	95,528
CIP Expenses	30,021
Customer Security Deposits	(103,872)
Working Capital	2,420,586

TOTAL RATE BASE	\$78,908,305
	=====

XIII. OPERATING INCOME STATEMENT

A. EPRI Dues

Interstate is a member of the Electric Power Research Institute (EPRI) and included \$194,122 as test year dues for this organization. The Department recommended excluding \$34,942 of test year EPRI dues which represent the nuclear power research portion of the dues.

According to Interstate, the fact that it does not own any nuclear generation does not mean that its ratepayers do not benefit from the research. Interstate purchases economy energy from Edison Electric, which has nuclear generation. Furthermore, the Company is affected by capacity in the Mid-Continent Area Power Pool (MAPP) system which is affected by the availability of Northern States Power's (NSP's) nuclear generation. Interstate also argued that consideration of future generating capacity will include nuclear power because of clean air and global warming concerns. The Company also stated that the Commission's billing assessment includes National Association of Regulatory Utility Commissioners (NARUC) dues. Since NARUC dues support activities unrelated to the Commission's regulation of energy matters, consistent treatment would require that a portion of the NARUC dues not be billed to Interstate.

The Department recommended exclusion of \$34,942 of EPRI dues because nuclear power research does not have a direct benefit for Interstate's ratepayers. Since Interstate does not now have nor does it plan to have any nuclear plants, the Company and its ratepayers receive no benefit from EPRI nuclear research.

The ALJ agreed with the Department that \$34,942 of nuclear related EPRI dues should be excluded from test year expenses. The ALJ found that the Company did not show that there are any direct benefits to ratepayers for the nuclear portion of EPRI dues, nor has it presented any other reason that ratepayers should pay for the cost of nuclear research.

The Commission agrees with the Department and ALJ to exclude \$34,942 that represents the nuclear power research portion of EPRI dues. The Commission finds no direct benefit for ratepayers for this portion of EPRI dues. Consistent with its prior disallowance of the nuclear research portion of EPRI dues for Interstate and other electric utilities, the Commission will disallow it in this case also.

B. Dues Paid to Local Organizations and Organizations That Conduct Lobbying Activities

Interstate included \$7,786 as test year expense for dues to local and lobbying organizations. \$6,402 of the \$7,786 are for dues paid to local organizations; the balance, \$1,384 is for dues paid to organizations that conduct lobbying activities. According to

the Company, local organizations are often catalysts for economic development. Economic development not only increases employment opportunities, it also helps hold down ratepayer costs by increasing load factors. Dues to organizations that foster economic development will counteract the loss of revenues due to lost customers. Thus, according to the Company, Minnesota ratepayers will benefit from the dues to local organizations.

Interstate also argued that dues to organizations such as the Chamber of Commerce create a more favorable business climate. Support for small businesses is important to improve the economic climate of the areas that the Company serves. Furthermore, rate recovery is consistent with Minnesota statutes that promote economic and community development.

The Department recommended disallowing the entire dues expenditures, \$7,786, from test year expenses. According to the Department, the local organizations' activities are unrelated to the provision of electric service. According to the Department, community, civic, booster, business and development organization dues were disallowed in Interstate's last rate case because there was no showing that the dues were necessary to provide or improve electric service. The Department stated that the Company did not support the claim that recovery of these membership dues would attract new business to the Company's Minnesota service areas.

The Department also recommended disallowance of \$1,384 for non-operating lobbying activities. Dues paid to the Minnesota Chamber of Commerce, Minnesota Taxpayers Association, National Association of Manufacturers, and the U.S. Chamber of Commerce should not be allowed recovery in rates. According to the Department, these organizations are lobbying organizations whose activities are other than those resulting from the regular activity of supplying energy and service to the consumer. Thus these dues are considered non-operating expenditures according to Minnesota rules and should be disallowed.

The ALJ excluded \$7,786 from test year expenses: \$6,402 for contributions and dues to commercial, civic, business development organizations and \$1,384 dues to lobbying organizations. The ALJ stated that the legislature had adopted a statute relative to such contributions since the Commission's decisions excluding such contributions from test year expenses. The ALJ stated that under the new statute the Commission has the discretion to decide whether or not such expenses will be recovered in rates. The ALJ stated that because it has been the Commission's past practice to exclude these expenses, he would exclude them.

The Commission finds that the statutory threshold for rate recovery of economic and community development expenses has been changed. The new statute states:

The commission may allow a public utility to recover from ratepayers the expenses incurred for economic and community development. Minn. Stat. § 216B.16, subd. 13 (Supp. 1991). (Emphasis added.)

The Commission agrees with the ALJ that under the new statute expenditures may be considered for recovery regardless of whether they are directly related to providing electric service, or whether they confer benefit upon the ratepayers. In these changed circumstances, the Commission's past decisions regarding such expenses are not controlling. Under the new statute, the threshold question is whether the expenditure was incurred "for economic and community development," but recovery does not automatically follow such a finding. In using the term "may," the statute gives the Commission the discretion to allow or disallow expenditures even after finding that they were incurred "for economic and community development."

The Commission finds that when the Company paid dues to local commercial clubs, town Chambers of Commerce, and various other local business, community, civic, development and booster clubs, it incurred those expenses "for economic and community development" within the meaning of Minn. Stat. § 216B.16, subd. 13 (1991) and will exercise its discretion to allow recovery of these expenditures. Regarding the dues paid to three non-local lobbying organizations, however, the Commission finds that the Company has not shown that it incurred these expenditures for economic or community development. Accordingly, these expenditures (\$1,384) are not eligible for consideration as test year expenses.

C. Long-Term Purchase Power Contract Costs

In the week prior to filing its August 15, 1991 petition to increase rates, Interstate entered into three long-term power purchase contracts for a total of 230 megawatts (MW). Approximately \$4 million or 50 percent of the requested rate increase is due to these three contracts. The contracts are with Iowa Public Service (IPS), United Power Association (UPA), and Minnesota Power (MP). The three purchase power contracts and the associated test year expenses are summarized as follows:

IPS	100 MW-Participation Power	\$1,958,117
UPA	100 MW-Participation Power	\$1,833,394
MP	30 MW-Participation Power	\$227,155

The contracts will be effective from May 1, 1992 until April 30, 2001. The total annual costs for these contracts exceeds \$23,000,000. Interstate has requested that Minnesota's jurisdictional portion of those annual contract costs be included as a test year operating expense.

As part of its burden of proving that a rate change is just and reasonable, a utility has the burden of proving by a preponderance of the evidence that the expenditures it claims as electricity purchase costs in the test year are reasonable. To meet its burden in this regard, the Company must meet two tests: the *prudence* test⁷ and the *used and useful* test⁸. The Company must show (1) that at the time it relied on its demand forecasts as the basis for entering the three long-term contracts it acted prudently and (2) that the electricity purchased will be "reasonably necessary to the efficient and reliable provision of utility service."⁹ The first test examines the Company's prudence, i.e. whether the Company exercised the care that a reasonable person would exercise under the same circumstances at the time the decision was made.¹⁰ The second test examines whether the Company has contracted for excess capacity.

Interstate's Forecast

The reliability of Interstate's demand forecasts is relevant to both tests and will be examined in detail.

The Company's overall load forecast is the sum of two forecasts: a Base Load forecast and a Large Industrial Load forecast. The Company's Large Industrial Load consists of eight large

⁷ "Prudency of investment is a fundamental consideration in determining whether a utility's proposed rates are just and reasonable." Petition of Interstate Power Company, 416 N.W.2d 800, 806 (Minn. App. 1987).

⁸ "The used and useful standard is reasonably applied to expenses as well as to rate base items." In the Matter of the Application of Northern States Power Company for Authority to Increase its Rates for Electric Service in the State of Minnesota, Docket No. E-002/GR-91-001 (November 27, 1991) at p.28.

⁹ Under the used and useful test, the Company must show that the property is in service and that it is "reasonably necessary to the efficient and reliable provision of utility service." Senior Citizens Coalition of Northern Minnesota v. Minnesota Public Utilities Commission, 355 N.W.2d 295, 300 (Minn. 1984).

¹⁰ A determination regarding the utility's prudence must be based on contemporaneous documentation. Re: Gulf State Utilities Company, 87 PUR 4th 428 (1986). See also Pennsylvania Public Utilities Commission v. Pennsylvania Power Company, 85 PUR 4th 323 in which the Pennsylvania Public Utility Commission held that "...prudence is that standard of care which a reasonable person would be expected to exercise under the same circumstances encountered by utility management at the time the decision had to be made."

industrial accounts, which represent approximately 20 percent of Interstate's total system demand. The Company analyzed these eight customers individually in developing its Large Industrial forecast. For its Base Load forecast, the Company used an econometric model with four independent variables:

- (1) service area economic activity, as measured by household income;
- (2) energy prices, as captured by the average price of electricity;
- (3) the number of residential customers, as measured by the number of households; and
- (4) weather, as a function of the temperature-humidity- index.

The Company's 1991 forecast indicated a capacity deficit beginning in 1992 increasing through the year 2000. Including the 15 percent reserve margin required by the MAPP, the Company's forecasted demand and deficit, in MW, are:

<u>Year</u>	<u>Forecasted Summer Capacity Obligation</u>	<u>Pre-Purchase Capacity</u>	<u>Capacity Deficit</u>
1991	1124	1124	0
1992	1150	1049	(101)
1993	1174	1049	(125)
1994	1195	1049	(146)
1995	1233	1049	(184)
1996	1272	1049	(223)
1997	1313	1049	(264)
1998	1355	1049	(306)
1999	1398	1049	(349)
2000	1427	1049	(378)

The Department had three specific criticisms of the Company's demand forecast: (1) the Company's model contains more explanatory variables than the data can support; (2) the model includes an explanatory variable (economic activity as measured by household income) that is not correlated with peak demand and is not stable¹¹; (3) Interstate's air conditioning market

¹¹ The Department argued that the key variable used by the Company, household income, failed the basic criteria for an explanatory variable because it was neither stable nor correlated to the dependent variable. The Department stated that the R-squared values for various variables vividly demonstrate the lack of correlation between household income and peak demand. Generally, when R-squared is 100 percent, there is perfect correlation; if R-squared equals zero, there is no correlation:

Number of Customers	68.36%
Price of Electricity	59.65%
Effects of Weather	41.22%
Household Income	3.18%

penetration assumption is not credible. The defects in the Company's forecast were compounded, according to the Department, by the Company's failure to take into consideration the capacity available from MAPP.

The ALJ found that the Interstate 1991 forecast of customer peak demand was flawed and unreliable for the reasons cited by the Department. In support of this conclusion he stated that:

- 1) Household income does not have a stable predictable relationship with customer peak demand.
- 2) Interstate's forecast of peak demand uses a model that contains more explanatory variables than Interstate's data base will support.
- 3) Interstate's assumption regarding air conditioning market penetration overestimates its peak demand in the near term by unreasonably assuming that central air and window air conditioning units will reach their level of highest utilization during the first year of the forecast period and will remain constant over time.

The Commission finds that the Department's criticisms of Interstate's forecast are well-founded and demonstrate the invalidity of the Company's forecasts.

In addition, the Company's failure to consider that the capacity available through MAPP compounded the Company's defective demand forecast. MAPP capacity is available for purchases by Interstate. The Company has made purchases from MAPP members in the past and is likely to do so in the future. The Company has argued that the projected availability for MAPP purchases should not be relied on. The Commission disagrees with this argument. One of the purposes of MAPP is to facilitate the coordination and planning among MAPP members to meet each utility's electric service needs. The Commission concludes that MAPP should have been considered as an alternative to the capacity purchases. The Commission concludes that the Company should have incorporated MAPP capacity availability in its analysis to determine how to meet its capacity demand.

The Department's criticisms, however, do not, of themselves, measure the extent of the Company's error. Fortunately, the Department also submitted its own forecast which eliminates the problems contained in the Company's forecast.

The Department's Forecast

The Department adjusted the Company's input data by removing the income variable from the Company's data set, replacing the Company's air conditioning penetration level with one that assumed a gradual increase. After making these adjustments to the input data, the Department prepared an independent forecast.

The Department forecast was lower than the Company forecast with a difference of 29 MW in 1991, 37 MW in 1992, and spreading to a 142 MW difference by 2000.

	<u>Interstate Forecast</u>	<u>Department Forecast</u>	<u>Difference MW</u>	<u>Year</u>
1991	1124	1095	29	
1992	1150	1113	37	
1993	1174	1126	48	
1994	1195	1136	59	
1995	1233	1162	71	
1996	1272	1188	84	
1997	1313	1216	97	
1998	1355	1243	112	
1999	1398	1271	127	
2000	1427	1285	142	

As a result of its analysis, the Department argued that three long-term purchase power contracts entered into with IPS, UPA, and MP result in excess capacity as follows:

<u>Year</u>	<u>DPS Forecast of Interstate's Excess Capacity (MW)</u>
1992	166
1993	168
1994	168
1995	142
1996	116
1997	88
1998	61
1999	33
2000	19

The Department's estimate of long-term peak demand has been subjected to a number of tests to determine its forecast reliability. Various measures of predictability show that the Department's model is more reliable than Interstate's.

Based on the Department's forecast, the Commission concurs with the ALJ's finding that the level of excess capacity from 1992-1994 will exceed 30 percent and removal of 100 MW capacity will not have an adverse impact on the capacity situation of Interstate during the next five years, i.e. until 1997. Stated another way, the three contracts in question secure 230 MW capacity, nearly twice as much as the Company needed to add to meet its peak demand during the next five years.

Applying the Used and Useful Test

Interstate argued that because the incremental cost of electricity from the contracts is lower than the average cost of producing electricity from its current generating plants, it will surely use the capacity made available through these contracts.

According to the Company, this means that these contracts will be "used and useful" and their cost, therefore, should be allowed.

The Company misunderstands the concept of excess capacity. If the Company, through its current generating capacity and the capacity it has contracted for, has total capacity that exceeds the needs of its customers by 100 MW per year, that amount is excess capacity. If the Company chooses to use the contracted capacity to meet its customers' needs, the Company must necessarily not use 100 MW of capacity available from its current generating facilities. It is not relevant to the "used and useful" analysis which portion of the Company's capacity it chooses to actually use to meet its customers needs; the remaining portion (100 MW) is excess capacity. This amount will not be "used and useful" to meet ratepayer demand.

Interstate suggested, however, that even if its combined capacity from the new contracts and current generating facilities exceeded its peak demand during the next three years by 100 MW this excess capacity would be "used and useful" because revenue from the sales of that excess capacity would be credited to its customers through the fuel clause adjustment.

The Commission finds that the mechanism proposed by Interstate to deliver the benefit of the sales of excess capacity to customers is inappropriate. The fuel clause is not a method to offset various costs and revenues unrelated to fuel. The Commission finds that this proposal is unreasonable and conflicts with the intent of the fuel clause.

More fundamentally, the problem with the Company's argument is that, in fact, there are no sales of that excess capacity to balance against the established costs of purchasing that capacity. In this circumstance, the inclusion of the additional cost for excess purchased capacity is contrary to conventional ratemaking and accounting principles of determining a normal level of revenues and expenses. Since revenues from the sales of the excess capacity do not appear in the Company's test year operating income statement, the expense related to those sales should be excluded. The Company's promise to credit revenues from the sale of the excess to customers through the fuel clause adjustment *in the future* obviously does not resolve the *current* mismatch of revenues and expenses in its proposed test year.

Based on the Department's forecast and the foregoing analysis, the Commission concludes that the Company's three long-term contracts will result in the Company having excess capacity in the amount of 100 MW per year during each of the next five years. This amount of electricity is not "reasonably necessary to the efficient and reliable provision of utility service" and therefore fails the "useful" prong of the used and useful test. Accordingly, the cost of 100 MW per year must be excluded from the test year cost of service. A convenient and appropriate proxy to indicate the cost of this amount of electricity is the

price the Company has contracted to pay IPS for 100 MW per year. The IPS contract amount for 100 MW per year, \$1,958,117, will be excluded from the test year cost of service.

Applying the Prudence Test

The fact that Interstate's demand forecast was defective, as found above, does not necessarily mean that the Company acted imprudently when it relied on that forecast and entered into the contracts in question. The Company's prudence is judged based on the information it had before it at the time of decision-making. In this case, however, the Commission finds that the Company did act imprudently when it entered those contracts because there were several things that would have led a reasonably careful utility company to question whether its forecast was seriously overstated, to reevaluate that forecast before proceeding, and to reject that forecast.

1. The Company knew the critical importance of an accurate demand forecast¹² and knew that the Commission had been critical of its load forecasting in the recent past.¹³
2. The Company knew or should have known that its 1991 forecast, which affected all subsequent years, was aberrant and too high. The Company's 1991 forecast jumped by nearly 20 percent in the long term after two years of declining growth forecasts.
3. The Company knew or should have known that its forecasts contained basic statistical errors including too few data points, lack of correlation of household income with peak demand, and the air conditioning market penetration error.

In these circumstances, a utility exercising due care on behalf of its customers' interests would have checked and revised its demand forecast. In failing to do so and entering into three long term contracts based on these faulty demand forecasts, Interstate acted imprudently. Fortunately for Interstate, it appears on the basis of the Department's forecast that much of the capacity contracted for will be needed.¹⁴ Rather than

¹² Interstate acknowledged that its load forecast was the catalyst for its electricity purchase decisions. One would expect that the information indicating the need to undertake purchases of such magnitude would have received greater scrutiny.

¹³ See In the Matter of the Petition of Interstate Power Company for Authority to Increase its Rates for Electric Service in Minnesota, Docket No. E-001/GR-86-384, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER (May 1, 1987) at p. 8.

¹⁴ The Department's forecast indicates that 130 MW or 56 percent of the 230 MW contracted for will be required to meet the

excluding from test year expenses the cost of the three contracts, the Commission will only exclude the cost of the unneeded capacity. The cost of 100 MW per year, as indicated previously, is found to be \$1,958,117, the price of 100 MW pursuant to the contract with IPS. Under the prudence test, this amount must be excluded from the test year cost of service.

D. Issues With Income Statement Effect Discussed Previously in the Order

Two issues affecting the operating income statement have been discussed previously in this Order. Rate case expenses were discussed in the RATE BASE section at pages 11 to 14. CIP expenses were discussed in the CONSERVATION section of the Order at page 5. The impact of those issues upon the operating income statement is as follows: the Commission reduced rate case expenses by \$99,067 and increased CIP expenses by \$13,342.

E. Operating Income Statement Summary

Based on the above findings, the Commission concludes that the appropriate Minnesota jurisdictional operating income for the test year under present rates is \$4,363,400 as shown below:

Operating Revenues:	
Retain Electric Revenues	\$36,668,744
Other Revenues	727,007

Total Operating Revenues	37,395,751
Operating Expenses:	
Production	15,078,141
Transmission	710,799
Distribution	3,056,916
Customer Accounts	1,106,066
Customer Services	155,438
Administrative and General	3,854,013
Depreciation and Amortization	4,871,480
Taxes Other Than Income	3,309,873
Federal and State Income Taxes	889,625

Total Operating Expenses	\$33,032,351

TOTAL OPERATING INCOME	\$4,363,400
	=====

XIV. RATE OF RETURN

Company's peak load.

A. Introduction

The overall rate of return represents the percentage the utility is authorized to earn on its Minnesota jurisdictional rate base. The overall rate of return is determined by the capital structure, which is the relative mix of debt and equity financing most of the rate base, and the costs of these sources of capital. The Commission will first address the capital structure, then the costs of debt and preferred stock and cost of equity. The Commission will then put these factors together to derive the authorized rate of return.

Three parties submitted rate of return testimony in this proceeding. Mr. Robert Jackson testified for Interstate, Dr. Eilon Amit for the Department, and Dr. Richard McIntire for the RUD-OAG.

B. Capital Structure

1. Summary of the Parties' Positions

Interstate proposed to use the December 31, 1990 capital structure consisting of 43.755 percent long-term debt, 4.768 percent short-term debt, 8.850 percent preferred stock and 42.627 percent common equity as shown below:

Year End 1990

<u>Capital</u>	<u>Amount (000s)</u>	<u>Percent</u>
Long-term Debt	\$190,876,030	43.755
Short-term Debt	20,800,000	4.768
Preferred/Preference Stock	38,604,500	8.850
Common Equity	<u>185,952,978</u>	<u>42.627</u>
Total	\$436,233,508 =====	100.000 =====

The Department and the RUD-OAG witnesses used the Company's proposed capital structure for calculating their recommended overall rates of return. Dr. Amit testified that the Company's proposed capital structure is reasonable because its equity and long-term debt ratios are comparable to those of utilities with comparable risk.

The RUD-OAG witness, Dr. McIntire, testified that an appropriate capital structure reflects the proper amounts of debt, preferred stock and common equity capital in order to balance the financial risk and the business risk of the utility. The RUD-OAG did not analyze the reasonableness of Interstate's proposed capital structure or recommend an alternative capital structure.

2. Recommendation of the ALJ

The ALJ found that the capital structure proposed by Interstate is the appropriate capital structure to be used for this proceeding.

3. Commission Findings and Conclusions

The Commission is charged with determining the most reasonable capital structure for Interstate for ratemaking purposes. Despite the fact that no party contests Interstate's proposed capital structure, the Commission must make independent findings on this matter and may not simply adopt that structure without examination.¹⁵

In making its capital structure determination, the Commission finds that the relative proportions of the various types of capital employed by the Company must be reviewed to ensure that ratepayers are not being required to pay an unnecessarily high cost of capital. Because common equity is typically the highest cost of capital, the equity ratio is of particular concern. Use of too much common equity in the capital structure could cause an excessive allowed rate of return.

The Commission also recognizes that the cost of capital is a function of the perceived risk. All other things being equal, the higher the percentage of common equity financing, the lower the risk. More common equity implies a greater likelihood that earnings will be sufficient to pay the fixed-cost obligations of interest on debt and dividends on preferred stock.

The Commission must, therefore, be satisfied that the Company has established a capital structure that properly balances the needs of ratepayers for economy and the needs of investors for safety. If the Commission finds that the Company has not achieved a reasonable balance, causing the ratepayers to pay an unreasonably high cost of capital, the Commission will adjust the allowed capital structure for ratemaking purposes to put it within a reasonable range.

Interstate has the burden of establishing by competent evidence that the capital structure it proposes is reasonable. Minn. Stat. 216B.16 subd. 4 (1990). To carry out its statutory duty to determine the most reasonable capital structure for ratemaking purposes, the Commission must consider all the evidence in the record.

Having considered all the relevant evidence in the record on this issue, the Commission finds that the proposed capital structure

¹⁵ The requirement of independent findings and examination of the record applies to every issue on which the parties agree in this Order. Every discussion of an uncontested issue in this Order assumes those parameters and they need not be restated in every such subsequent discussion.

is reasonable with respect to the relative proportions of the various forms of capital employed by the Company, and that its use will not result in an unreasonably high overall cost of capital. The Commission concludes that the capital structure as proposed and shown above should be adopted for the purpose of determining the authorized rate of return for final rates.

C. Costs of Long- and Short-term Debt and Preferred Stock

In its original filing, Interstate proposed a test year cost of long term debt of 7.907 percent, short-term debt of 7.89 percent, and preferred stock of 8.073 percent. No parties challenged the Company's proposed costs of debt and preferred stock. The ALJ found these costs to be reasonable in determining Interstate's overall rate of return.

The Commission accepts the costs of long-term debt of 7.907 percent, short-term debt of 7.89 percent, and preferred stock of 8.073 percent. The Commission finds that these costs are appropriate for determining the Company's overall cost of capital.

D. Cost of Common Equity

The Commission must next determine a fair and reasonable rate of return on common equity for the Company. Common equity has a cost determined in the capital market by forces acting on the market as a whole, such as inflation and the general economic outlook, and by concerns peculiar to the specific industry and the specific company. Unlike holders of debt or preferred stock, common shareholders have no contractual right for specified payments. Instead, they have an ownership claim on the residual amounts after interest on bonds and dividends on preferred stock have been paid. Because of this, the cost of common equity cannot be measured directly, but can only be estimated.

1. Legal Guidelines for Commission Decision-Making

In reaching a decision on the appropriate cost of common equity, the Commission, as an administrative agency, must act both within the scope of its enabling legislation and the strictures of reviewing judicial bodies. Two United States Supreme Court cases provide these general guidelines for Commission rate of return decisions:

- a. The allowed rate of return should be comparable to that generally being made on investments and other business undertakings which are attended by corresponding risks and uncertainties;
- b. The return should be sufficient to enable the utility to maintain its financial integrity; and
- c. The return should be sufficient to attract new capital

on reasonable terms.

See Bluefield Water Works and Improvement Co. v. P.S.C., 262 U.S. 679 (1923), and FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944).

No particular method or approach for determining rate of return was mandated by those cases, but the necessity of a fair and reasonable rate of return was clearly stated:

Rates which are not sufficient to yield a reasonable return on the value of the property used, at the time it is being used to render the service, are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. Bluefield Water Works, 262 U.S. at 690.

The Minnesota Supreme Court has also provided some legal guidelines for Commission decision-making. In Minnesota Power & Light Company v. Minnesota Public Service Commission, 302 N.W. 2d 5 (1980), the Court said:

...The single term "ratemaking" has been used to describe what is really two separate functions: (1) the establishment of a rate of return, which is a quasi-judicial function; and (2) the allocation of rates among classes of utility customers, which is a quasi-legislative function.

...we now hold that the establishment of a rate of return involves a factual determination which the court will review under the substantial evidence standard.

302 N.W. 2d at 9.

In conducting its evaluation of the Commission's decision, the Court explained:

...A reviewing court cannot intelligently pass judgment on the PSC's determination unless it knows the factual basis underlying the PSC's determination. Judicial deference to the agency's expertise is not a substitute for an analysis which enables the court to understand the PSC's ruling. Henceforth, we deem it necessary that the PSC set forth factual support for its conclusion. The PSC must state the facts it relies on with a reasonable degree of specificity to provide an adequate basis for judicial review. We do not require great detail but too little will not suffice.

302 N.W. 2d at 12.

In order to provide the factual basis for its decision required by the Court, the Commission will review the testimony of each of

the parties on rate of return on common equity, and the objections raised thereto by other parties. The Commission will also review the recommendations of the ALJ. Finally, the Commission will draw its conclusions from the parties' testimony and determine the proper rate of return.

2. Summary of the Parties' Positions

In this proceeding, Department witness Dr. Eilon Amit, RUD-OAG witness Dr. Richard McIntire, and the ALJ relied primarily on the discounted cash flow (DCF) analysis to make their estimate of the cost of equity. Company witness Mr. Robert Jackson used a combination of six different methods to determine a recommended cost of equity.

a. Interstate

The Company requested a return on equity of 12.9 percent based on an analysis of six different methods: a standard DCF analysis; a market-to-book adjusted DCF analysis (DCF-2); an internal rate of return analysis; a payout ratio analysis; a comparable earnings analysis; and a risk premium analysis.

Interstate witness Robert Jackson based his cost of equity determination on a study of Interstate and a group of 12 comparable companies. In making this analysis, Mr. Jackson gave equal weight to the data from each company including Interstate.

In determining its recommended Return On Equity (ROE), the Company calculated an average value and a median value using each method, then determined a midpoint for the group of median values and a midpoint for the group of average values. The two resulting values were then averaged to determine the Company's requested ROE.

<u>Method</u>	<u>Average</u>	<u>Median</u>
DCF (Standard)	11.08%	10.73%
DCF-2 (Market/Book adjusted)	13.15	13.06
Internal Rate of Return	10.64	9.25
Payout Ratio	13.72	13.91
Comparable Earnings	13.23	13.20
Risk Premium	<u>12.68</u>	<u>12.68</u>
Median	<u>12.92</u>	<u>12.87</u>
Requested ROE	<u>12.90</u>	

RUD-OAG witness McIntire contended that Mr. Jackson did not screen the comparable group to exclude companies that are drastically different from Interstate. Dr. McIntire specifically listed UtiliCorp United, Inc., which received 56 percent of its revenues from natural gas in 1990, and Pacificorp, whose 1990 revenues sources were 17 percent from telecommunications

operations, 22 percent from coal operations, and 3 percent from financial service operations. By contrast, in 1990 Interstate received 81 percent of its revenues from electricity. Dr. McIntire argued that the Company's faulty group produced results based on flawed data for five of the six methods used: the DCF analysis, the second DCF-2 analysis, the internal rate of return, the payout ratio, and the comparable earnings analysis.

The six methods used by Mr. Jackson and the parties' additional criticisms of those methods are as follows:

1) DCF Analysis

Mr. Jackson relied on an analysis of Interstate and a comparison group of utility companies as the basis for his DCF study. Including an adjustment to reflect the expected growth in dividends over the next year, Mr. Jackson determined the dividend yield for the group of companies to be 7.48 percent.

In determining the growth rate, Mr. Jackson averaged the historic ten year, five year, and three year dividend growth rates, the estimated future dividend growth rate, and the historic five year retention growth rate. This method produced a 3.6 percent growth rate for the entire group.

Combining the growth rate with the dividend yield produced an 11.08 percent average and a 10.73 percent median cost of equity for the group of companies including Interstate.

The Department and the RUD-OAG witnesses both criticized the growth rates used by Mr. Jackson. Dr. McIntire contended that Mr. Jackson placed too much weight on historical growth rates.

2) DCF-2 Analysis

Mr. Jackson performed a second DCF analysis in which he adjusted the original DCF analysis by multiplying the dividend yield estimate by the market-to-book ratio. This adjustment increased the dividend yield for the comparable group to 9.55 percent, producing a 13.15 percent average return on equity and a 13.06 percent median return on equity.

Both the Department and the RUD-OAG witnesses argued that Mr. Jackson's DCF-2 analysis eliminates the effect of the market price from the calculation. As a result, Mr. Jackson's analysis does not produce a market based estimate of the cost of equity. Both parties also indicated that the standard DCF analysis embodies investors' perceptions of the market-to-book values so an additional adjustment is not necessary.

The Department also argued that the Company's use of the DCF-2 method is inconsistent. In this case, the Company multiplied the dividend yield by the market-to-book ratio, a reversal of the Company's previous position. In the past, when the Company's market-to-book ratio was less than one, the Company divided the dividend yield by the market-to-book ratio. The Department further argued that neither Mr. Jackson nor its own witness Dr. Amit were aware of any academic literature supporting Mr. Jackson's adjustment.

3) Internal Rate of Return Analysis

Mr. Jackson utilized an internal rate of return analysis assuming a holding period from 1991 to 1995. Mr. Jackson estimated that by holding stock in companies of the comparable group until the end of 1995, an investor could earn an average annual return on equity of 10.64 percent. A 10.64 percent average return on equity and a 9.25 percent median return were used in Mr. Jackson's recommended rate of return computation.

According to Dr. Amit, the fact that Mr. Jackson achieved different results from his internal rate of return analysis and his DCF analyses showed that Mr. Jackson had not consistently applied the two methods. Dr. Amit also argued that the stock prices used are dated and may not reflect the expected stream of dividends used by Mr. Jackson. Dr. McIntire claimed that Mr. Jackson's analysis placed too much confidence in estimates of future stock prices and dividends.

4) Payout Ratio Analysis

In Mr. Jackson's dividend payout ratio analysis the required earnings per share for each company were estimated by dividing the current dividend per share by the company's five year average payout ratio. The earnings per share were then divided by the company's 1990 book value per share to produce an indicated return on equity. The average and median values determined by this method were 13.72 percent and 13.91 percent respectively.

Dr. Amit argued that Mr. Jackson's payout ratio analysis is not a market oriented indicator of Interstate's required return on equity. He also argued that the results did not appear reasonable for a group of comparable companies. This analysis produced rates of return as high as 20.6 percent and as low as 12.6 percent for companies in the group.

Dr. McIntire noted that the Company computed the cost of equity as though the ratio of dividends to earnings were stable over time for individual companies and the industry. Dr. McIntire pointed out that the payout ratios are not fixed, that the ratios for the comparable companies varied between 42.1 percent and 84.8 percent, and that in any particular period, the payout ratio trend may change from what it had been previously.

5) Comparable Earnings Analysis

Mr. Jackson's comparable earnings study relied on an analysis of historical earned returns on equity in which he reviewed the returns of Interstate and the comparison group for the years 1986 to 1990. He reported that the average return on equity for the group during this period was 13.23 percent and the median return was 13.20 percent.

Dr. Amit testified that the required rate of return depends on the economic environment at the time the analysis is performed. Historical returns, including those used in Mr. Jackson's analysis, may not reflect the current financial markets and may be inappropriate for estimating the current cost of capital. Dr. McIntire argued that by averaging the last five years of information, the Company has masked the recent downward trend in earnings.

6) Risk Premium Analysis

Finally, Mr. Jackson also employed a CAPM risk premium analysis to calculate a rate of return on common equity. Interstate used the standard CAPM formula, $k = R_f + \beta(R_m - R_f)$; where:

- k was the required rate of return on equity;
- R_f (the risk free rate) was the rate of return on long-term government bonds;
- R_m (the expected rate of return on the entire market) was the annual return on an index of common stocks for the 64 years between 1925 and 1990;
- β (beta) was the measure of the relationship of the comparable group with the overall market.

Using the CAPM, Mr. Jackson calculated a 12.68 percent cost of equity.

Department witness Dr. Amit and RUD-OAG witness Dr. McIntire both testified that Mr. Jackson's CAPM-type risk premium analysis is not a reliable indicator of the required rate of return. They testified that the method produces substantially different results depending on the value selected for the beta or the selection of the time period. Dr. McIntire demonstrated that the risk premium even becomes negative in years when stock prices fall.

b. Department of Public Service

Testifying for the Department, Dr. Amit performed a DCF analysis to estimate the cost of equity for Interstate. He checked his results with a CAPM.

1) DCF Analysis

Dr. Amit constructed two groups of comparable companies, a group of electric companies, and a group of combination gas and electric companies. However, his recommendation was based on the results of an Interstate specific analysis.

Using the latest available four-week closing prices, Dr. Amit determined the dividend yield for Interstate to be 6.29 percent. This dividend yield included an adjustment to reflect one-half of the expected growth in dividends over the next year. Dr. Amit then made a floatation cost adjustment to reflect a 5 percent issuance cost. This was done by dividing the dividend yield of 6.29 percent by 95 percent. The result was a floatation adjusted dividend yield of 6.62 percent.

For an Interstate specific growth rate Dr. Amit used the Icarus forecasted growth rate of 3.9 percent. Combining the dividend yield and growth rates produced the Interstate-specific 10.52 percent cost of equity recommended by Dr. Amit.

Company witness Mr. Jackson and RUD-OAG witness Dr. McIntire both criticized Dr. Amit's analysis for relying on a time period that is too short.

Mr. Jackson also claimed that Dr. Amit's DCF analysis significantly understates the cost of common equity by relying upon the unadjusted DCF method.

2) CAPM Analysis

Dr. Amit used the CAPM to check the results of the DCF analysis. Using long-term government bonds as a proxy for the risk free investment, Dr. Amit's CAPM analysis produced a rate of return of 10.35 percent.

Mr. Jackson argued that Dr. Amit's CAPM study does not support the DCF results. Before the DCF was updated, the spread between the CAPM and the DCF was 58 basis points. Mr. Jackson also argued that the risk premium was not sufficient.

c. Office of Attorney General

Dr. McIntire estimated Interstate's dividend yield to be 7.3 percent by taking an average of 12 monthly dividend yields in 1991 for a group of comparable companies. He adjusted the dividend yield by a factor of 1.0175 to reflect one-half of the expected increase in dividends during the next year for a dividend yield of 7.42775 percent. He derived the growth rate by averaging the projected per share growth rates of earnings, dividends, and book value for a result of 3.5 percent.

Adding the 7.42775 percent dividend yield to the 3.5 percent growth rate produced an ROE of 10.92775 percent upon which Dr. McIntire based his 10.9 percent cost of equity recommendation.

Interstate criticized Dr. McIntire's analysis for its sole reliance on an unadjusted DCF analysis. The Company argued that without the adjustment Dr. McIntire's recommendation significantly understates the cost of common equity.

The Department disagreed with Dr. McIntire's use of a 12-month average dividend yield. Dr. Amit argued that Dr. McIntire's analysis did not use the most recent information, resulting in an outdated estimate of the cost of equity capital.

2. Recommendation of the ALJ

The ALJ found that the DCF method is a market oriented approach and is the appropriate method for estimating the cost of equity in this proceeding.

The ALJ found that the appropriate test year return on equity for Interstate was 10.9 percent. He arrived at this number by combining Dr. McIntire's dividend yield of 7.4 percent with the investor expected growth rate of 3.5 percent recommended by Dr. McIntire.

The ALJ agreed that the methodology employed by Interstate for its cost of equity determination appeared to be flawed. In his discussion, the ALJ stated that the comparable earnings analysis is inadequate because it is based upon historical realized rates of return that do not reflect current financial markets; using them to estimate prospective rate of return is without merit. Likewise, the ALJ noted that Mr. Jackson's payout ratio analysis is not a market oriented indicator of Interstate's required return on equity and instead produces an indicated return on book value.

3. Commission Findings and Conclusions

The Commission finds that the appropriate return on equity for Interstate in the test year is 10.9 percent. In making this determination the Commission adopts the testimony of RUD-OAG witness Dr. Richard McIntire.

The Commission finds that an appropriate determination of the cost of equity capital for a company should not be based on book returns but should be based on a market oriented analysis that reflects investors' required return.

The Commission agrees with the ALJ that the DCF method is appropriate for determining the cost of equity for Interstate in this case. The DCF method is firmly grounded in modern financial theory, and has been recommended by the Department and the

RUD-OAG in this proceeding and by this Commission in nearly every case decided since 1978. The Commission finds it is reasonable to place substantial weight on direct DCF analysis of Interstate since Interstate is actively traded in the market and its price, dividends and past performance are directly observable.

The cost of common equity cannot be directly observed in the marketplace but can be inferred from market data with the application of reasoned judgment. The DCF method seeks to estimate the return expected by investors by using the current dividend yield plus the expected growth in dividends.

After careful consideration of the record in this case, the Commission concludes that Dr. McIntire's DCF analysis provides the most reasonable balance of market data and expert judgment in determining the appropriate ROE for Interstate. The two primary components of a valid DCF analysis are the dividend yield and the growth rate.

Dividend Yield

In calculating the dividend yield for his DCF analysis, Dr. McIntire looked at the market conditions for Interstate and the industry. Dr. McIntire recommended the 7.4 percent dividend yield figure of the comparable companies be used as a proxy for the Interstate yield because the recent decline in Interstate's yield is contrary to the experience of the comparable companies. The record does not support a conclusion that conditions contributing to the recent decline in Interstate's dividend yield will continue. In light of the dividend yield experience of the comparable companies, the Company's experience appears aberrational and temporary. In these circumstances, Dr. McIntire's comparable group analysis appears to be a more reliable indicator of investor expectations during the relevant time period.

Growth Rate

While the current dividend yield is fairly easily observed in the market, the determination of the appropriate growth rate is much more subjective. The Commission must determine the rate at which investors expect Interstate dividends to grow in the future. In applying the DCF method, it is reasonable to assume that investors place some weight on past growth trends in determining future expectations. The analysis of historical data must be tempered, however, with the consideration of current and expected economic trends.

In arriving at his growth recommendation Dr. McIntire reviewed historic as well as projected growth rates. Dr. McIntire's recommended 3.5 growth rate was an average of the projected per share growth rates in earnings, dividends and book value. The Commission agrees that while investors may consider historical values, they receive new information that causes them to expect

that future growth rates may not be the same as historical rates. Since Value Line projected growth rates are published and available to investors the Commission considers the growth rate used by Dr. McIntire to be an appropriate representation of investors' expectations.

The Commission prefers Dr. McIntire's DCF analysis to Dr. Amit's for two main reasons. First, the length of the period selected by Dr. Amit for calculating the dividend yield is insufficient. The Commission does not consider Dr. Amit's period long enough to smooth out short term aberrations in the market. Second, the record does not indicate a need or provide a factual basis for the determination of Dr. Amit's proposed floatation cost adjustment in the test year. There is no evidence establishing historic issuance costs nor does the record contain any evidence indicating the level of any planned new issuance.

Interstate's DCF method is also unsatisfactory. Unlike Dr. McIntire, Mr. Jackson did not select a group of truly comparable companies, either in size or in type. In addition, Mr. Jackson's use of the entire growth rate to adjust the dividend yield is inappropriate. In this case the proper method would be to use one half of the expected growth rate. This would reflect that the dividend increase for each company could occur at any point in the year, with half of the increases observed in the first part of the year and half occurring in the second part of the year.

The Company's five other methods of calculating the cost of capital are likewise flawed. They are not market oriented and do not reflect current market conditions.¹⁶ Furthermore, in averaging the results of six methods to produce a proposed ROE, Interstate departed from the established method (DCF) with no indication of increased accuracy. Each of the additional methods averaged by Mr. Jackson into a final proposed figure is itself flawed, as indicated previously and for reasons cited by the Department and the RUD-OAG. Averaging the results of six flawed methods clearly provides no basis for an appropriate cost of equity.

E. Overall Rate of Return

Based upon the Commission's findings and conclusions on return on equity, cost of debt and preferred stock, and capital structure herein, the Commission finds the overall rate of return for Interstate to be 9.197 percent, calculated as follows:

¹⁶ These defects are perhaps most pronounced in Mr. Jackson's second DCF analysis. By eliminating the market factor from its DCF-2 analysis, Mr. Jackson produces a book yield and ROE which is not market based and does not reflect current market conditions.

<u>Capital</u>	<u>Percent</u>	<u>Cost %</u>	<u>Weighted Cost %</u>
Long-term Debt	43.755	7.907	3.460
Short-term Debt	4.768	7.890	0.376
Preferred Stock	8.850	8.079	0.715
Common Equity	<u>42.627</u>	10.9	<u>4.646</u>
Total	100.000		9.197
	=====		=====

XV. REVENUE DEFICIENCY

Based on the Commission findings and conclusions, the Minnesota jurisdictional gross revenue deficiency for the test year is as shown below:

Rate Base	\$78,908,305
Rate of Return	9.197%

Required Operating income	\$7,257,197
Operating Income	4,363,400

Operating Income Deficiency	\$2,893,797
Revenue Conversion Factor	1.6798

Gross Revenue Deficiency	\$4,861,000
	=====

The Commission found that the Minnesota retail revenue at present rates is \$37,395,751. Adding the gross revenue deficiency of \$4,861,000 to this amount results in total authorized revenue from Minnesota retail customers of \$42,256,751.

XVI. RATE DESIGN

A. Class Cost of Service Study

1. General Methodology

A Class Cost of Service Study (CCOSS) is designed and used for the purpose of quantifying the costs imposed upon a utility system by each class of customers on that system. The CCOSS is also used to determine how costs will be recovered from customers within each customer class. The CCOSS has three parts. First, costs are separated by function, such as production, transmission, or distribution. Second, costs are divided by classification into demand-related, energy-related and customer-related costs. Finally, demand, energy, and customer costs are assigned through allocation to specific classes.

Interstate presented an embedded CCOSS using the average and excess method to allocate costs among classes. The Department

produced its own embedded CCOSS using the stratification method to classify and allocate costs. The ALJ supported Interstate's method. The ALJ stated that the Department's application of the stratification method was rejected by the Commission in Interstate's last rate case, and that Interstate's method best allocates capacity costs to all customers.

The classification and allocation of production plant is the best example of the difference between Interstate's and the Department's CCOSS methodologies.

Under the stratification method as used by the Department, production plant is classified as partly demand-related and partly energy-related. The portion of production plant considered demand-related is derived by assuming all production plant capacity was built at the low cost of peaking production plant. Energy-related production plant is the balance remaining when actual total production plant costs are reduced by the amount previously classified as demand-related. The Department then allocates its demand-related production plant costs on the basis of contribution to single hour coincident peak, and its energy-related plant costs on the basis of energy usage.

Interstate classifies all production plant costs as demand-related. Using the average and excess CCOSS methodology, Interstate then allocates these demand-related costs based on the rate class's share of total average and excess demand. The total average and excess kW demand is equal to the average of the two highest hourly Minnesota kW peaks which occurred in the test year. The share of the kW value applicable to a particular rate is derived from the relationship of the average demand and the maximum demand characteristic of the particular rate to such characteristics for all the retail rates.

The Department applied the stratification method to Interstate's functionalizations, classifications and allocations and arrived at the following four exceptions to the Company's cost findings:

1. classification and allocation of production plant;
2. classification and allocation of baseload and peaking power purchases;
3. allocation of transmission plant; and
4. allocation of conservation costs.

For the following reasons, the Commission finds that the Department's application of the stratification method should be accepted in this rate case.

The stratification method properly classifies some production plant cost as demand-related and some production cost as energy-related. The Commission has previously recognized the

reasonableness of the stratification method because it accurately reflects production plant's dual purpose of meeting demand and energy requirements.

The stratification process, which classifies some of the costs of production plant into the energy category and some into the demand category, is well supported by economic theory. The stratification process recognizes that baseload plants cost more to build but are able to provide energy at a lower cost. Conversely, peaking plants cost less to build but are more expensive to operate... The purpose of stratifying production plant expenses into baseload/peaking portions is to reflect in the cost allocation process the fact that a significant portion of the fixed costs associated with a baseload production plant were incurred in order to produce the less expensive energy needed to meet the average demand.

In the Matter of the Petition of Northern States Power Company for Authority to Change its Schedule of Rates for Electric Utility Service for Customers within the State of Minnesota,
Docket No. E-002/GR-85-558, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER (June 2, 1986) pp. 70-71.

The Department's stratified methodology should also be applied because the Department's analysis is based on the Company's actual plant mix rather than on Interstate's method of assuming a ratio of energy- to demand-related production plant.

As applied in this case, the stratification method more accurately assigns costs based on cost causation than does the average and excess method. This is because the Company's average and excess method arbitrarily classifies all fixed production plant costs as demand-related and all variable costs as energy-related. In this case the "fixed-variable" method does not truly address the question of what causes a cost and how the cost should be allocated.

Finally, the Commission notes that the ALJ stated that the Department's application of the stratification method in this case resolves the Commission's previous concerns in the last Interstate rate case.

The Commission has found the stratification method reasonable in past rate cases and finds its application by the Department appropriate in this case. The method reflects the dual purpose of production plant, tracks the Company's actual plant mix, and contributes to accurate cost causation. Previous concerns regarding the Department's methodology application have been addressed. The Commission will therefore accept the Department's application of the stratification method. The four areas of exception which the Department noted as a result of its CCSS are more fully discussed below.

2. Classification and Allocation of Production Plant, Capacity Purchases and Transmission Plant

The Company criticizes the stratification method because it allocates the capacity-related costs of production plant, the capacity-related demand charges for power purchases, and transmission plant costs on the basis of class contributions to a single peak hour. Certain classes are assigned no capacity-related costs.

The Commission agrees with the Department that it would be more appropriate to use a multiple-coincident peak method to allocate demand-related cost. However, the Commission notes that the necessary Company load data to derive a multiple coincident peak is dated, borrowed from other utilities, or not available. Moreover, under the stratification method, those classes that were not assigned capacity-related production plant costs were allocated a portion of these costs on the basis of their contribution to total MW hour (MWh) sales.

The Commission also agrees with the Department that power purchases should be classified as if Interstate owned the production plant that produced the purchased power. Therefore, both production plant costs and capacity purchases should be classified and allocated using the same method.

The Commission concurs with the Department that peaking power purchases are incurred primarily to serve capacity needs; thus, they should be allocated solely on the basis of class contribution to the system coincident peak. Baseload power purchases, incurred to meet both capacity and energy needs, should be divided into energy- and demand-related components and allocated on the basis of energy and demand allocators.

The Commission finds that transmission plant costs should be allocated on the basis of class contribution to the system coincident peak as recommended by the Department. The size and resulting costs of the transmission system are primarily a function of the location of load centers and coincident peak demands on the system. Therefore, capacity requirements, not energy requirements, drive the need for transmission plant.

The Commission concludes that the stratification method as applied in this case classifies costs based on cost causation and more accurately reflects which customer classes are responsible for the costs than the average and excess method.

3. Allocation of Conservation Costs

The Company and the Department classified and allocated conservation project costs differently. The Company allocated conservation costs using the weighted number of customers in each class as the allocation factor.

The Department proposed to classify conservation costs by the type of savings (energy or capacity) each conservation project produces. However, the Department was unable to classify costs in this way, given Interstate's project information. For this reason, the Department split conservation costs evenly, 50 percent allocated on the basis of energy and 50 percent on the basis of class contribution to system peak. The Department then allocated energy-related conservation costs on the basis of class contribution to total MWh sales and allocated the capacity-related conservation costs on the basis of class contribution to coincident peak.

The Commission finds the Department's approach to be reasonable. The Company's method assumes conservation costs vary with the number of customers and does not reflect the reasons that the costs were incurred. The Commission believes it is preferable to classify costs based on cost causation. This results in a more reasonable allocation of costs to customer classes. The Commission has adopted the Department's approach to classifying and allocating conservation costs for both NSP and Otter Tail Power Company.

In future rate cases, Interstate will be required to classify and allocate conservation costs as recommended by the Department in this case. The Company will also be required to provide an evaluation of each CIP project to determine the project's capacity and energy benefits.

4. Class Cost of Service Studies for Future Rate Cases

Interstate's load research for Residential and Large Power and Lighting customers is dated. Moreover, the Company's load data for other customer classes is based on load research from other utilities. Given the importance of accurate load data in the development of a CCROSS, the Commission will require the following:

- (1) within six months of this Order, the Company will be required to file its 1991 load data with the Commission, along with proposals for new rates based on the data;
- (2) in future rate cases, the Company should use its new load research to determine an appropriate multiple-coincident peak allocator for allocating production plant and other costs; and
- (3) in future rate cases, the Company should submit its full CCROSS, not just the materials the Company submitted through working papers in this proceeding.

B. Class Revenue Responsibilities

1. Class Allocations

The Company proposed class increases based on each class's embedded cost of service as indicated by the Company's own cost study. The Department also made proposals for class revenue allocation based on cost indicated in its own cost study.

The RUD-OAG did not address the issue of class revenue allocation. However, with three exceptions, the RUD-OAG adopted the Company's proposals for rate design. The ALJ did not address the issue of class revenue allocation but did adopt the Company's CCOSS.

For each individual class, the Company and the Department based proposed increases on cost, except in cases where such an increase would exceed 1.5 times the overall increase. For these classes, the Company and the Department proposed that the increase not be more than 32 percent. Both cost studies indicated that the following two classes have revenue shortfalls of more than 32 percent: Municipal Pumping (Rate 622) and Controlled Water Heating (Rate 326).

Department witness Dr. Amit allocated revenue shortfalls from these classes to the Residential Rate 161 and the Large Power and Lighting (LPL) classes. The Department recommended this allocation because these two classes have larger revenue requirements relative to Interstate's other classes. The effect on rates of allocating the shortfall amount between these two classes is very small. Company witness Berentsen allocated revenue shortfalls to all other customer classes.

The Commission finds that the revenue allocation to all classes proposed by the Department is reasonable, when adjusted proportionately for the lower revenue requirement ordered herein. The Department's proposal for class revenue allocation is consistent with the results of its CCOSS, which has been adopted by the Commission, and will provide reasonable rates based on cost.

2. Competitive Discount to Farmstead Foods

In 1990, the Legislature enacted legislation allowing electric utilities to offer service at reduced rates to large customers capable of meeting their energy needs through unregulated suppliers. Minn. Stat. § 216B.162 (1990). The statute requires that the utility be allowed to seek recovery of the difference between standard rates and competitive rates in a general rate case.

In October 1991, the Commission approved a competitive rate proposal for Farmstead Foods, one of Interstate's LPL customers. Docket No. E-001/M-91-558. Under the approved rate, Farmstead

receives a 25 percent discount on demand, energy, and stand-by power charges from the standard LPL rate.

In this case, the Company and the Department have proposed that Interstate recover the lost revenue that results from the discount from the LPL class. Since the amount of lost revenue is small relative to total LPL class revenue, the Commission finds the parties' proposal to be reasonable. However, the Commission notes that this decision is based on the facts in this case and a different set of facts could result in a different decision.

C. Residential Rates

1. Conservation Rate Break (CRB)

The Company proposed to retain its current level of conservation rate break credit of \$3.25 for customers who use 300 kWh or less per month and \$1.63 for customers who use between 301 to 400 kWh per month. No other party commented on this issue.

The Company noted that in spite of the availability of the credit only for the state of Minnesota, the Company found no difference in the average monthly consumption among customers in Minnesota, Illinois and Iowa. The Company also argued that its CIP program addresses the concern for conservation.

In NSP's last rate case (Docket No. E-002/GR-91-1), the Commission reduced the level of NSP's conservation credit by \$1.00 at the lower usage level and 50 cents at the higher usage level. In that case, parties argued that the credit is not cost effective, that no significant conservation is necessarily achieved by customers who qualify for it and that there is a low level of customer awareness of the credit.

In this case, the Commission will make a similar \$1.00 and 50 cent reduction in the two levels of the credit for Interstate. The Commission will reduce the credit to \$2.25 at the lower usage level and to \$1.13 at the higher usage level. This is an appropriate reduction, given the inability of the Company to determine the value of the credit and the Commission's policy to reduce or eliminate such credits.

In the NSP Order, the Commission recognized the shortcomings of the credit as a vehicle for providing affordable electricity to low-income customers. However, the Commission was reluctant to permit full elimination of the credit without a thorough examination of options for addressing the needs of low-income customers. Therefore, NSP was ordered to provide a discussion of alternatives for addressing low income energy needs in its next rate case filing. The Commission will require Interstate to make a similar report in its next rate case filing. This report will assist the Commission in addressing concerns related to rate

increases for low-income customers if the Commission decides to completely phase out or further reduce the credit in Interstate's next rate case.

2. Customer Charge

The customer charge, or basic service charge, is a flat rate monthly charge assessed for being hooked up to the system. The Company proposed to increase its customer charge for the residential rate classes 120 (Total Electric Multiple-Dwelling) and 161 (General) from \$3.25 to \$4.25. The Company argued that a 30 percent increase in the customer charge was a reasonable move toward cost in this case. The Company maintained that the RUD-OAG proposal to maintain a below cost customer charge, while increasing the energy charge, would not promote conservation.

The Department proposed a \$5.00 customer charge. It argued that setting the customer charge closer to cost reduces intraclass subsidies. The Company and the Department agreed that a customer charge that is set below cost creates an intraclass subsidy between low and high energy use customers. This occurs because high use customers pay a portion of their customer and demand costs through an above cost energy charge.

The RUD-OAG proposed a \$3.75 residential customer charge. The RUD-OAG argued that the increases proposed by the Company and the Department were too large and would not send the correct price signal to customers. According to the RUD-OAG, significantly increasing the customer charge while the energy charge remained low would reduce customer incentive to conserve.

The ALJ adopted the Company's proposal for a \$4.25 charge. He concluded that the proposal would move the basic service charge toward cost in a manner consistent with the principles of rate design.

The Commission notes that customer charges are substantially below cost for all classes of customers. For Interstate's standard residential rate class 161, both the Department's and the Company's cost studies indicate a \$11.13 customer cost. As a result, the Commission believes an active step should be taken in this case to move these charges closer to cost. Moving prices toward cost is a reasonable policy which sends the proper price signals, spreads costs in an equitable fashion, and tends to eliminate intraclass cost subsidization.

Apart from the RUD-OAG, all parties agreed that the customer charge should move toward cost. The dispute is over how quickly the move should be made. The Commission finds the Department's proposal for a \$5.00 charge superior because it reduces the intraclass subsidies more quickly than the proposals made by the Company and the RUD-OAG. A \$5.00 customer charge still represents only 45 percent of the cost of providing basic

service. The \$3.75 customer charge proposed by the RUD-OAG represents only 34 percent of the cost to provide fixed basic service to customers.

3. Declining Block Energy Rates

At the current time, Interstate's residential rates 120 and 161 include declining block energy charges. In this case, the Company proposed to eliminate the remaining declining block for the residential rate 120 and to reduce the number of declining energy blocks from three to two for the residential rate 161. In addition, for the 161 rate the Company proposed to reduce the differential between the two remaining blocks. The Company argued it was important to maintain a declining block energy charge for the 161 rate in order to moderate the rate impact for larger use customers.

The Department and the RUD-OAG supported the Company's proposal to eliminate the declining block energy rate for the 120 rate. In addition, these parties proposed the elimination of a declining block energy rate for the 161 rate. They argued that declining block rates send anti-conservation price signals to customers. Moreover, they disputed the Company's claim that elimination of the declining block would result in an extreme rate increase for high use customers on the rate. The ALJ adopted the position of the Department and the RUD-OAG on this issue.

The Commission has generally replaced declining block energy rates with flat rates because they better reflect costs, are nondiscriminatory and promote conservation. In this case, the Commission believes Interstate has not demonstrated that the potential increase in rates for high energy users is large enough to make the move to a flat energy rate unfeasible. As noted by the RUD-OAG, while the percentage increases at higher usage levels are of concern, the widespread effect is not substantial. Almost 90 percent of the 161 rate customers consume less than 1,500 kWh a month. Under the Company's proposed revenue requirement, customers at this consumption level would experience about a 28 percent increase under a straight-line energy rate, assuming a \$5.00 customer charge. This increase is not unreasonable, given the Company's proposed revenue increases for other classes.

The Commission notes that declining block rates have a historical basis that does not now exist. In the past, declining block rates were favored because the more electricity sold, the cheaper each additional unit would be. Today, increased sales may cause the need for plant additions as capacity increases. Consequently, total costs may increase. This result is contrary to the Commission's policy of promoting conservation and demand-side management to achieve least cost service.

4. Electric Space Heating Rate

The RUD-OAG proposed the creation of a separate space heating rate. The rate is designed to reduce the impact of the rate increase that space heating customers would otherwise incur due to the elimination of the declining block energy rate in the standard residential rate. The proposed rate is similar to the space heating rate approved for NSP in its last rate case (Docket No. E-002/GR-91-1).

The Company opposed the creation of such a rate, arguing that the RUD-OAG's proposal was incomplete and not fully considered. The Company also argued that the existing Optional Residential Rate 163 addresses the needs of space heating customers.

The Commission believes that the impact on high-use customers of the elimination of declining block rates is a concern. In the last NSP rate case, the Commission noted that establishing a separate space heating rate would help alleviate this rate impact on high-use customers, and would also send a better price signal to customers. The Commission finds that the space heating rate proposed here will have the same effects. The Commission will adopt the space heating rate proposal.

The Commission notes that the Optional Residential Rate 163 is a three-part rate that includes both a substantially higher customer charge and a demand charge. Such a rate may not be appropriate for all space heating customers.

In comparison to the standard residential rate, the new space heating rate will have an increased customer charge throughout the year and a reduced energy charge during the off-peak winter months of November through March. Since the details of the rate have not been specified in the record, the Company will be required to file a proposal for the rate, following the principles proposed by the RUD-OAG, in its compliance filing in this case.

The Commission believes that customers on the space heating rate should not be unreasonably subsidized by the existing customers on the standard residential rate. Therefore, the Commission will establish a floor on the increase in the energy charge to space heating customers. The increase in the energy charge for these customers will not be less than the increase for the non-space heating customers currently on the standard rate.

For the reasons stated above, the Commission finds that the RUD-OAG proposal for a separate space heating rate is reasonable. The Company shall be required, as part of its compliance filing in this case, to file a plan indicating how it will identify customers who use electricity for their primary heat source and thus qualify for this rate.

5. Elimination of the Residential Total Electric Multiple Dwelling Rate 120

Currently, Interstate offers a separate rate to residential customers living in all-electric multifamily dwellings (Total Electric Multiple Dwelling Rate 120). The RUD-OAG proposed that this rate be eliminated and that customers on the rate be merged with customers on the standard residential rate.

The RUD-OAG recommended the elimination of the rate for five reasons as follows: (1) the differences in the existing charges between the residential rate 120 and the standard residential rate are small; (2) the cost differences are also small; (3) the historical basis for the 120 rate no longer applies; (4) there is no study showing that usage profiles of space heat customers vary depending on the type of dwelling; and (5) the rate is currently closed to new customers.

The Company opposed the elimination of the rate. It argued that until its load data study is completed, and the costs of the two rates can be reviewed, the rate should not be eliminated. It also argued that since the rate is closed to new locations, there is no urgency to eliminate the rate.

The Department supported the position of the RUD-OAG. It agreed that the cost of service for residential rates 120 and 161 is very similar and does not justify separate rates. The ALJ adopted the arguments of both the RUD-OAG and the Department on this issue.

The Commission finds that the historical basis for the 120 rate no longer exists. The rate was originally created in order to provide parity in the cost of space heat between the apartment dweller and the single-family residential user. The 120 rate was designed with an initial block up to 400 kWh, followed by a heating block from 401 kWh and up. With the elimination of the declining block in the 120 rate, in this case, the existing 120 rate structure is obsolete.

The Commission concurs with the RUD-OAG, the Department and the ALJ that the differences between the two rates are so insignificant that a separation cannot be justified. Moreover, there is no evidence in the record demonstrating that usage profiles of space heat customers in single-family dwellings differ from those in multifamily dwellings.

The Commission will eliminate Residential Rate 120.

6. Optional Residential Rate 163

The Optional Residential Rate 163 was approved by the Commission on December 20, 1990 in Docket No. E-001/M-90-645. The rate was designed to provide residential customers with more options by offering a three-part rate which includes a demand charge. The

rate consists of a flat energy charge, a demand charge and a customer charge. The inclusion of a demand charge provides residential customers with an incentive to lower their non-coincident peaks, improving their load factors. The customer charge for this rate includes the incremental cost of a new Time-of-Use meter.

The Company proposed a customer charge of \$11.50 per month, a demand charge of \$6.66 per kW, and an energy charge of \$0.0229 per kWh. The Company argued that the difference in rate levels between its proposal and the Department's was due to the difference in the two cost studies.

The Department proposed a basic service charge of \$14.35, a demand charge of \$4.50, and an energy charge set equal to the standard residential rate. The Department argued that the Company's approach to determining charges for this rate was inconsistent with the method used in its initial petition for the rate filed in August 1990. Moreover, the Department argued the Company's proposed rate levels were too far from their corresponding cost components, as indicated by the Department's cost study.

The Commission adopted the Department's CCOSS and its recommendation for class revenue allocations as discussed in previous sections of this Order. For this reason, the Commission finds it appropriate to adopt the Department's recommendation on the charge levels for this rate. The Commission notes that the total customer cost for this class is \$11.13 per month; the additional metering cost is \$3.21. Thus, a customer charge of \$14.35 is appropriate.

D. Non-residential Rates

1. General Approach

For non-residential rates, the Company and the Department both argued that customer and demand charges for all rates should be moved toward cost as indicated by their own cost study. As they had done with residential rates, the parties disagreed over how quickly the move toward cost should be made.

The Company proposed limiting the increase for any non-residential rate schedule to a maximum of 30 percent by applying the 1.5 rule. The Company applied this goal to specific rate components as well, increasing demand charges up to 30 percent where necessary to keep energy charge increases lower.

The Company argued that the Department's proposed rate design moves customer and demand charge rate components too quickly toward cost and creates wide swings in rate increases at individual customer usage levels.

The Department also sought to limit rate schedules increases to a maximum of 30 percent by applying the 1.5 rule. In an attempt to set customer and demand charges closer to cost, the Department increased these charges by a maximum of 50 percent.

The Commission concurs with the Department's two primary rate design goals as follows: (1) taking an active step to move rates closer to cost, and (2) moderating rate increases. In all cases, the Commission will adopt the Department's proposals for non-residential rate design.

The Commission notes that some of the wide differences in rate increases at individual customer usage levels under the Department's proposal are caused in part by its cost study. However, the Commission recognizes that by setting customer and demand charges closer to cost, energy charges will also be set closer to cost. Taking this step will reduce intraclass subsidies, in which high use customers pay part of the customer and demand cost through an above-cost energy charge. The Commission also notes that although the Department's cost study indicates a higher aggregate energy cost for particular classes, its proposed energy rates are in many cases lower than the Company's.

The Commission recognizes that there is no dispute over the level of customer costs as indicated by the two cost studies. Again, the dispute is over how quickly customer charges should be moved toward cost. The Commission finds the Department's proposal to move customer charges toward cost is a reasonable plan and will approve it.

For four non-residential rates, the Department proposed higher demand charges than the Company. As with the customer charge, the Commission notes that the Department's proposal will move these charges closer to cost. The Commission adopts the Department's position on demand charges.

In all cases, the Commission has adopted the Department's proposals for non-residential rates because they more accurately reflect cost and thus the charge levels are more reasonable.

2. Large Power and Lighting (LPL) Rate 447

The Company proposed a customer charge of \$50.00 per month and an energy charge of \$0.03866 per kWh for the LPL rate. The Company also proposed to retain the declining block demand charges for this rate, a \$5.25 per kW charge for the first 200 kW and \$4.25 per kW charge for demand over 200 kW. The Company argued that under the Department's proposal high use LPL customers could receive increases in their demand charge of more than 50 percent.

The Department proposed a customer charge of \$57.00 per month, a flat demand charge of \$6.50 per kW, and an energy charge set to recover revenue equal to the class revenue requirement for this

class. The ALJ adopted the Department's position, finding that the Company offered no justification for continuing the declining block demand charge for the LPL class.

The Commission notes that the \$57.00 customer charge proposed by the Department is closer to the \$177.25 customer cost than the Company's proposed \$50.00 charge. The Company's proposal recovers only 28 percent of the customer costs for this class, while the Department's proposal recovers 32 percent.

Moreover, the Commission concludes there is no justification for declining block demand rates for this class. As discussed in previous sections of this Order, the Commission has generally replaced declining block rates with flat rates because they better reflect costs, are nondiscriminatory and promote conservation. It will do so here.

The Commission finds that the Department's proposal for the LPL Rate 447 is reasonable and will adopt it.

3. Large Power and Lighting (LPL) Rate Power Factor

Currently, the LPL rate provides two options for calculating the power factor adjustment. Since the early 1980's, the Company has permitted several customers to be billed under the "average power factor method," while other customers have been billed under the "uniform power factor method." In this case, the Company proposed changing its rate schedule to allow the application of only one power factor billing method, the uniform power factor method. The Company argued that different power factor calculations requiring different power factor levels should not be used on the same rate schedule. No other parties commented on this issue.

The Commission adopts the Company's proposal for power factor adjustments in the LPL rate schedule. The Commission notes that the change would effect only 22 LPL customers and that the dollar impact on an individual customer is small. However, the Commission will require the Company to provide further information verifying the reasonableness of a reactive demand charge of \$0.49 per KVAR in excess of 50 percent of the maximum kW metered during the month.

4. General Service (GS) Rate 260

The Company proposed increasing the customer charge for the GS rate to \$8.25, and the demand charge to \$3.25 per kW. The Department proposed a \$9.25 customer charge, a \$3.50 per kW demand charge and an energy charge set to generate the remainder of the class revenue requirement.

The Commission accepts the Department's proposal for this rate because in each case charge levels will be set closer to cost.

The Commission notes that the Company's proposed customer charge recovers only 44 percent of the customer costs of \$18.74, while the Department's recovers 49 percent.

5. GS Space Heating and Cooling Rate 301

The Company proposed eliminating this rate and transferring customers on it to three other rates: General Service without demand meter (Rate 260); General Service with demand meter (Rate 261); and Three Phase Farm class (Rate 838). The distribution of customers among these three rates would be based on the specific service characteristics of each customer. The Department supported the Company's proposal.

The Commission notes that the costs for the GS Space Heating and Cooling rate and the other three rates listed above are similar. Moreover, the Commission notes that the elimination of the GS Space Heating and Cooling rate is consistent with the Commission's Order in Interstate's last rate case. In that Order, the Commission found that no cost justification exists for a separate GS Space Heating and Cooling Rate. For these reasons, the Commission will adopt the Company's proposal to eliminate the rate.

6. Municipal Pumping Rate 622

The Company proposed increasing the customer charge to \$8.25 and the demand charge to \$3.25 per kW for this rate. The Department proposed a \$9.25 customer charge and a \$3.75 demand charge. Because the Department's proposal for this rate is consistent with the results of its cost study, the Commission will adopt the Department's proposal. The energy charge will be set to recover the remaining class revenue, adjusted for the lower overall revenue requirement.

In NSP's last rate case (Docket No. E-002/GR-91-1), the Commission noted that a multi-period time of day rate would allow municipal pumping customers to reduce their electric bill while providing a benefit to the NSP system. The Commission therefore ordered NSP to design and file a multi-period time of day rate. The Commission finds it appropriate, in this case, to require Interstate to make a similar filing. The Commission will require Interstate to file a proposal for a rate with multi-period peak hours in its next rate case. At a minimum, the rate should be applicable to the Municipal Pumping class; Interstate may propose a rate of wider applicability if appropriate.

7. Single Phase Farm Rate 808

The Company and the Department agreed that a customer charge of \$8.25 was appropriate for this rate, given customer costs of \$14.41. The Commission adopts the parties' proposal for the customer charge. The energy charge will be set to recover the remaining class revenue requirement.

8. Three Phase Farm Rate 838

The Company proposed increasing the customer charge to \$8.25 per month and the demand charge to \$3.25 per kW, and establishing a flat energy charge of \$0.05548 per kWh for this rate. The Department proposed a \$9.25 customer charge and a demand charge of \$3.75 per kW. The Commission adopts the Department's proposal for this rate in order to move charges closer to cost. The energy charge will be set to recover the remaining class revenue requirement.

9. Stored Heat Rate 303

The Company proposed increasing the customer charge for this rate to \$3.00 per month. The Department proposed an increase to \$3.75. The Commission adopts the Department's proposal for the this rate in order to move the customer charge closer to cost. The energy charge for this rate will be set to recover the remaining class revenue requirement.

10. Controlled Water Heating Rate 326

The Company proposed increasing the customer charge for this rate to \$3.00. The Department proposed an increase to \$3.75 per month. The Commission adopts the Department's proposal for this rate in order to move the customer charge closer to cost. The energy charge will be set to recover the remaining class revenue requirement.

11. Security Lighting

The Company proposed changes in the terms and conditions of this rate class. Currently, customers can choose only units with sodium vapor (SV) bulbs. The Company proposed to begin installing not only SV units, but also lighting units with equivalent or better energy efficiency. The Department supported this change. The Commission will adopt the change because it will encourage energy efficiency and because it has been accepted by all parties.

The Company also proposed raising each of the fixture rates in this class by about 15.50 percent. The Department recommended reducing the rates proposed by the Company by 11.33 percent. The Commission finds the Department's proposal for fixture rates is more closely aligned with cost and will adopt it.

12. Company-owned Street Lighting

The Company proposed to install only SV or higher efficiency units for all new extensions, additions, complete or major revisions, or replacements to existing Company-owned street lighting. The Department supported this change. The Commission will adopt the change because it encourages energy conservation.

The Company also proposed a \$1.18 charge for both new and old separate wood poles not used for other distribution purposes. The Department supported this change. The Commission will adopt the change because the increase in the charge is based on cost.

In addition, the Company proposed setting new rates for Company-owned street lighting and eliminating the rates for fluorescent and incandescent units from its tariff since it no longer has any such units on its system. Based on information in the Department's cost study, the Department recommended a reduction in all of the Company's proposed rates for Company-owned street lighting by 14.65 percent. The Commission will adopt the Department's recommendation because it is based on cost.

13. Municipally-Owned Street Lighting

The Company proposed changes in service for these rates that would encourage municipalities to replace their incandescent and fluorescent units with more efficient units. The Department supported these changes. The Commission will adopt these changes because they encourage energy conservation.

The Company utilized the same method it used for Company-owned street lighting to determine the revenue increase for municipally-owned street lighting. The Department recommended reducing all of the Company's proposed rates for municipally-owned street lighting by 14.65 percent, based on the results of its own cost study. The Commission supports this recommendation and will adopt it because the Department's proposed increase is based on cost.

E. Miscellaneous Charges and Provisions

1. Time of Use Energy Charge Adjustment (Rider 1T)

The Company proposed revisions to grant increased credits for off-peak consumption and an increased surcharge for on-peak consumption. The Company proposed to maintain the existing ratio between the credit and the surcharge. No other party commented on the change.

The Commission finds the Company's proposal for increasing the credit and the surcharge on this rider to be reasonable and will adopt it. The Commission notes that maintaining a percentage relationship in a discount, versus a dollar relationship, can work to preserve the value of the discount to the customer.

2. Non-Sufficient Funds (NSF) Charge

The Company proposed increasing its NSF charge to \$15. No other party commented on this issue. In the Company's last gas rate case (Docket No. G-001/GR-90-700), the Company demonstrated that \$15 was an appropriate NSF charge and the Commission adopted the

charge. Since the same Company office processes both gas and electric bills, the Commission finds the adoption of a \$15 charge in this case appropriate.

3. Electric Service Extension Policy

The Company proposed revising its electric service extension policy to give customers additional options for payment where extension requests exceed normal extensions. No other party commented on this issue.

In the past, the Commission has encouraged utilities to provide additional options for the payment of extension costs. The Commission finds the proposed revision reasonable and will adopt it.

F. Adjustments for Lower Revenue Requirement

The Commission has approved a revenue requirement lower than the one proposed by the Company. Given the fact that the Commission has adopted the Department's cost of service study, the Commission will require Interstate to adjust rate levels to reflect the lower revenue requirement as follows: class revenue allocations proposed by the Department and adopted by the Commission will be adjusted proportionately to reflect the lower revenue requirement; and the level of individual customer charges adopted by the Commission will be maintained. Energy and demand charges adopted by the Commission for each rate will be adjusted by the same percentage to meet the revised class revenue responsibility.

ORDER

1. Interstate Power Company is entitled to increased annual revenues of \$4,861,000 to produce total annual operating revenues of \$42,256,751 from Minnesota retail customers for annual periods beginning October 14, 1991.
2. Within 30 days of the date of this Order, Interstate shall file with the Commission for its review and approval, and serve on all parties in this proceeding, revised schedules of rates and charges reflecting the revenue requirement and the rate design decisions contained herein. Interstate shall include proposed customer notices explaining the final rates. Parties shall have 15 days to comment on the compliance filing.

3. Within 60 days after all administrative review of this Order has been exhausted, Interstate shall file with the Commission, and serve upon all parties, detailed rate case expense documentation. This filing shall include copies of invoices from outside witnesses, counsel, and all other persons, agencies, or businesses to whom rate case expenses were paid. All such documentation shall be identified with the corresponding rate case expense projections in this filing in order to permit comparison.
4. Within 90 days of the date of this Order, Interstate shall refile its conservation plan, including a discussion of the "conservation continuum" in its discussion of goals and objectives.
5. Interstate shall begin applying the CCRC revenues to the CIP tracker account as of November 1, 1991.
6. Within 90 days of the date of this Order, Interstate shall file a plan for estimating actual energy savings of direct-impact DSM programs.
7. Interstate shall file a calculation of revenues lost due to conservation for each year by March 1 of the succeeding year, beginning with March, 1994.
8. Within six months of the date of this Order, Interstate shall file its 1991 load data with the Commission, along with proposals for new rates based on the data.
9. In its next rate case filing, Interstate shall use its new load research to determine an appropriate multiple-coincident peak allocator for allocating production plant and other costs.
10. In its next rate case filing, Interstate shall provide a thorough discussion of alternatives for addressing the energy needs of low income people.
11. Within 60 days of the date of this Order, Interstate shall file a proposal for the new Space Heating Rate, following the principles proposed by the RUD-OAG. The plan should indicate how Interstate will identify customers who qualify for the rate. The increase in the energy charge for the new Space Heating customers must not be less than the increase for the non-Space Heating customers currently on the standard rate.
12. Within 30 days of the date of this Order, Interstate shall file further information on the LPL rate schedule, verifying the reasonableness of a reactive demand charge of \$0.49 per KVAR in excess of 50 percent of the maximum kW metered during the month.

13. In its next rate case filing, Interstate shall design and file a multi-period time of day rate. At a minimum, the rate shall be applicable to the Municipal Pumping class; Interstate may propose a rate of wider applicability if appropriate.
14. In its next rate case filing, Interstate shall incorporate all changes to its CCOSs recommended by the Department and adopted by the Commission. In addition, the Company shall file its full CCOSs, including all relevant working papers.
15. In its next rate case filing, Interstate shall file an evaluation of capacity and energy benefits for each of its CIP projects.
16. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Richard R. Lancaster
Executive Secretary

(S E A L)